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Pedestrian Safety Initiative Update

A Cross-Departmental Initiative:
Police
Transportation
Public Information

November 10, 2015

Meeting Agenda

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- Review Follow-Up Items from Last Year's Meeting
- Update on Move From MAARS to ACRS
- 2014 County Collision Trends
- Collision Trends around Public Schools
- Update on Parking Facility Collisions
- The 3 E's:
  - Enforcement
  - Engineering
  - Education

Meeting Goals and Desired Outcomes

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Meeting Goals

- Monitor the performance of the Pedestrian Safety Initiative
- Identify trends in pedestrian collisions to drive targeted resource allocation
- Identify and discuss specific strategies for mitigating pedestrian collisions

Desired Outcomes

- Improve safety for pedestrians, bicyclists, and motorists in Montgomery County through targeted engineering, education, and enforcement efforts

Collision Data Definitions

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Collision Data in this report are bound by the following parameters:

1. Data only include collisions between a motor vehicle and a pedestrian(s) as reported to the State through the Maryland Automated Accident Reporting System (MAARS) for 2007-2013 or the Automated Crash Reporting System (ACRS) in 2014-present.
2. Collision in this report refers to the overall incident – it does not reflect the number of pedestrians injured in the collision. E.g., a motor vehicle colliding with three pedestrians will be reported as one collision.
3. MCPD currently collects collision data from the Cities of Rockville and Gaithersburg, but **not** from Maryland State Police, Takoma Park, Chevy Chase, or Park Police.

Overview of the Pedestrian Safety Initiative

Pedestrian Safety has been a cross-cutting issue of focus for CountyStat since 2008. Through the years, DOT, MCPD, and PIO in collaboration with CountyStat have engaged in targeted resource allocation and efforts that have reduced the average number of per capita collisions per year, and dramatically reduced the number of severe collisions across the County. Data analysis has enabled the County to continually monitor and assess progress, identify specific areas where more effort has been needed, and direct our focus on where to go next to continue making our sidewalks and crosswalks safer for our residents.

Since 2008, there have been four broad areas of success:

- Identification of and focus on High Incidence Areas
- Safe Routes to School
- Traffic calming
- Parking lots and parking garages

Pedestrian Safety Follow-Up Items

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Responsible Department	Meeting Date	Follow-Up Item	Status
DOT, MCPD, PIO	7/23/2014	Sustain the education and enforcement components of the overall Pedestrian Safety strategy around the HIAs to mitigate potential diminishing returns over time	Complete
PIO, MCPD, DOT	7/23/2014	Develop a county-wide education campaign addressing Visibility of Pedestrians	Complete
DOT, MCPD	7/23/2014	Examine increases or tactical changes in enforcement between 5-8pm, with a focus on the evening drive-time collision hot spots and collaborating with DOT on visibility issues where appropriate	Complete
DOT, MCPD, PIO	7/23/2014	Develop a targeted plan to focus on pedestrians ages 10-29, who are over-represented in collisions as compared to population; explore cooperative agreements with the School Board and/or individual principals for sustained efforts within schools	Complete
MCPD	7/23/2014	Provide to CAO a breakdown of collision data in Parking Lots/Garages by County-owned vs. privately-owned lots/garages	Complete
DOT, MCPD	7/23/2014	Conduct an analysis of collision data in the vicinity of all County schools, in addition to the schools that are part of the Safe Routes to Schools grants	Complete
CountyStat	7/23/2014	Plan a Bicycle Safety CountyStat session for fall/winter 2014	Complete
MCPD	7/23/2014	Be able to provide interim collision data for internal analysis until the new state ACRS system and its data-back capability are functioning	Complete

Move from MAARS to ACRS

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- In April of 2014, Montgomery County migrated from the paper-based traffic accident report (MAARS) to the automated traffic collision reporting system (ACRS).
- When MCPD switched over to ACRS, Maryland State Police (MSP) did not design a data return feature in their automated process which left the local agencies without any of their traffic crash data.
- In late 2014, after a coordinated effort by the County and other agencies, MSP developed a “Data-back” tool that enabled us to retrieve our ACRS information for analysis.
- In July of 2015, MSP turned-off the “Data-back” tool in a redesign effort. The current plan is to turn-on the new “Data-back” tool sometime in November.
- As such, Montgomery County does have our 2014 data but only a majority of the 2015 data from January to June.

Source:
MCPD

High Incidence Areas: Expenditures and Obligated Funds

	FY12 Budget	FY12 Actual	FY13 Budget	FY13 Actual	FY14 Budget	FY14 Actual	FY15 Budget	FY15 Actual	FY16 Budget
Engineering & Construction (DOT)	$1,050,000	$ 713,000	$1,354,000	$1,416,000	$1,465,000	$1,351,987	$1,487,650	$1,075,895	$1,500,000
Education (DOT)	$150,000	$255,000*	$150,000	$198,000*	$150,000	$265,322*	$150,000	$77,025	$150,000
Enforcement (MCPD)**	$0	$50,000	$0	$99,200	$0	$60,224	$0	$46,881	$0
Performance Monitoring (DOT)	$50,000	$25,000	$50,000	$10,000	$50,000	$54,742	$50,000	$0	$50,000
Total	**$1,250,000**	**$1,043,000**	**$1,554,000**	**$1,723,200**	**$1,665,000**	**$1,733,033**	**$1,687,650**	**$1,201,045**	**$1,700,000**

*Expenditures includes carry-over from previous fiscal years

** Enforcement currently unfunded. Figures only include County funded overtime.

Source: Pedestrian Safety Implementation Team

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2014 Collision Trends

Montgomery County Pedestrian Collisions and Fatalities

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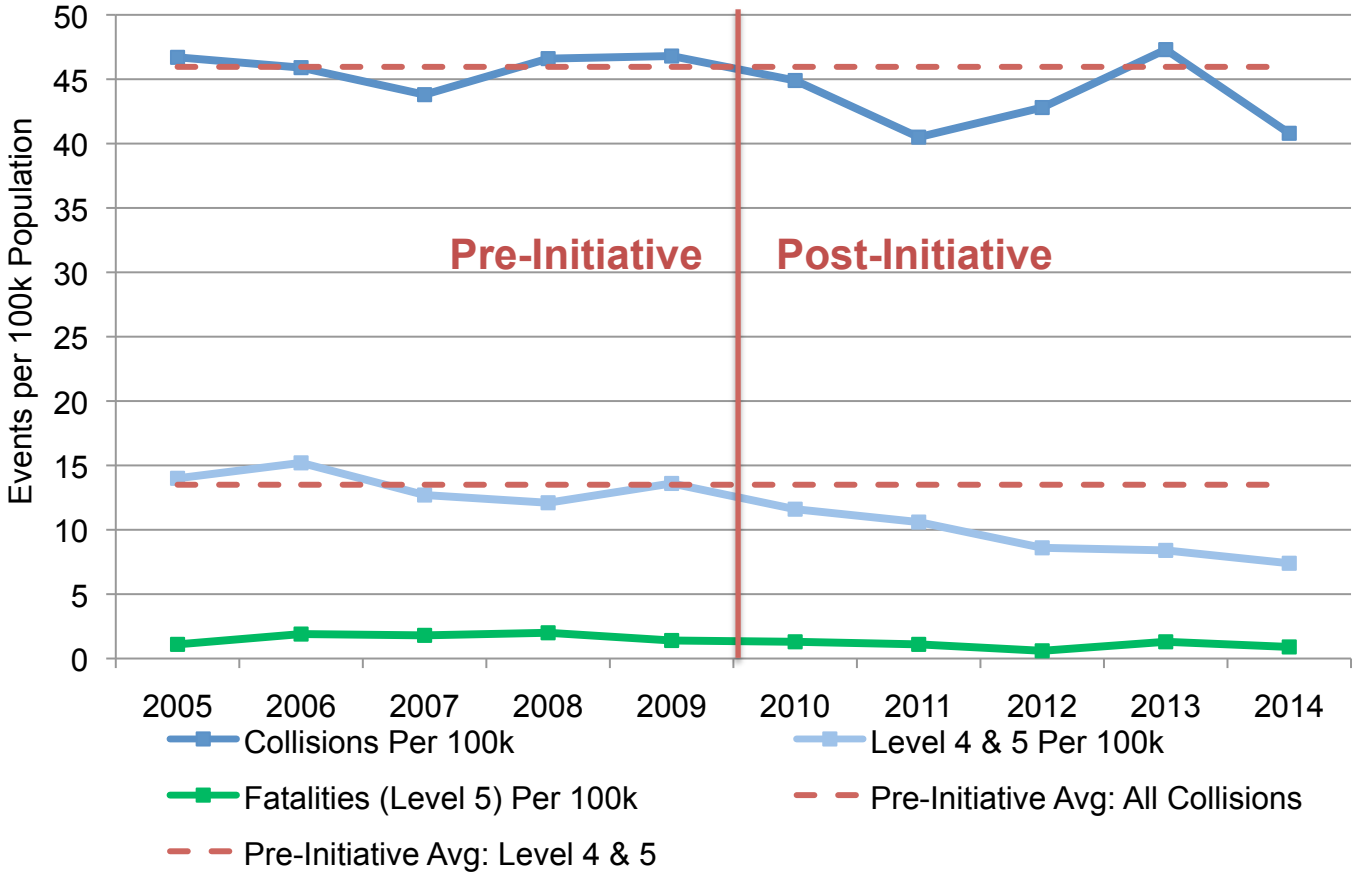
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Pre-Initiative Average (2005-2009)	Post-Initiative Average (2010-2014)	Change
January	36	31	32	48	34	34	28	40	50	41	36	39	+8%
February	28	28	33	30	37	39	27	36	38	23	31	33	+6%
March	37	28	34	37	31	33	38	27	36	29	33	33	0%
April	26	25	35	34	28	33	36	27	43	22	30	32	+7%
May	27	36	34	47	46	33	28	36	40	35	38	34	-11%
June	41	33	29	24	41	33	17	35	34	31	34	30	-12%
July	24	29	20	37	36	33	24	23	30	32	29	28	-3%
August	28	37	26	36	32	26	33	31	36	27	32	31	-3%
September	39	39	38	35	30	41	32	35	41	41	36	38	+6%
October	48	42	37	31	41	44	43	44	55	54	40	48	+20%
November	48	49	60	38	46	43	42	48	40	42	48	43	-10%
December	52	52	34	47	52	44	51	41	38	43	47	43	-9%
Total Collisions	434	429	412	444	454	436	399	423	481	420	435	432	-1%
Per 100,000	46.7	45.9	43.8	46.6	46.8	44.9	40.5	42.8	47.3	40.8	46.0	43.3	-6%
Level 4 & 5 Collisions (% of total)	130 (30%)	142 (33%)	119 (29%)	115 (26%)	132 (29%)	113 (26%)	104 (26%)	82 (19%)	85 (18%)	76 (18%)	128	92	-28%
Per 100,000	14.0	15.2	12.7	12.1	13.6	11.6	10.6	8.6	8.4	7.4	13.5	9.3	-31%
Total Fatalities*	10	18	17	19	14	13	11	6	13	9	16	10	-38%
Per 100,000	1.1	1.9	1.8	2	1.4	1.3	1.1	0.6	1.3	0.9	1.6	1.0	-38%

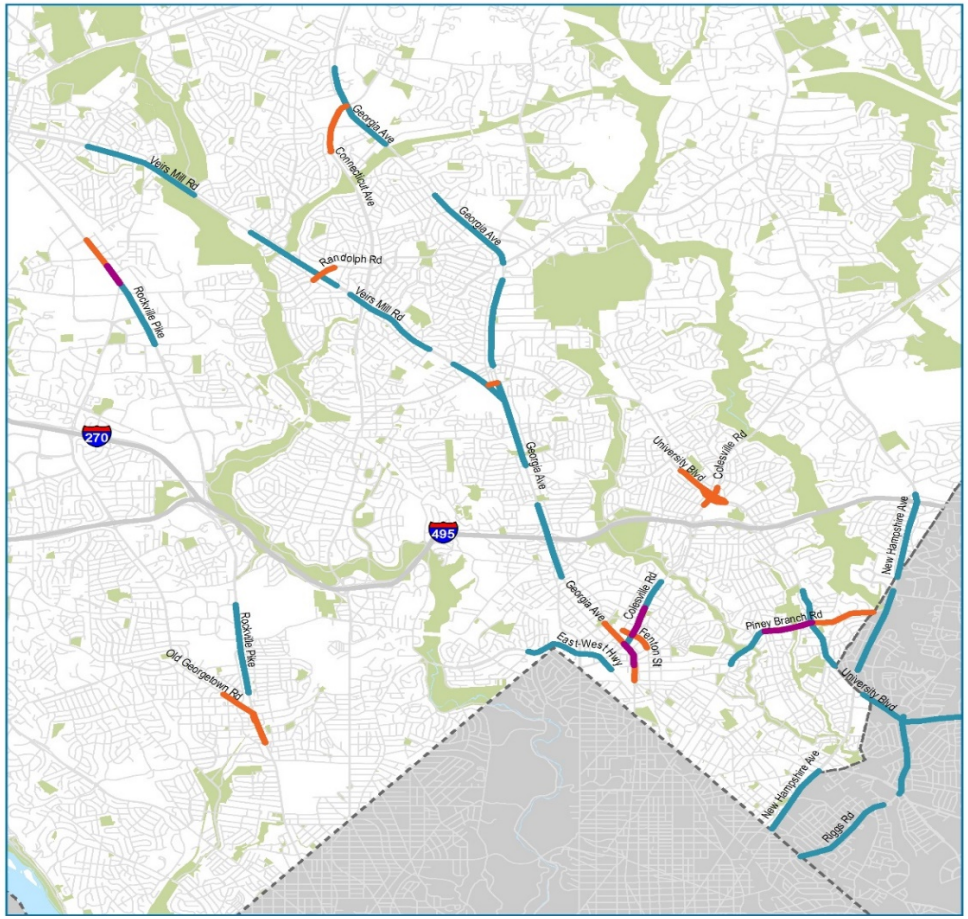
*Does not include bicycle fatalities
Source: MCPD. Full funding of Initiative started in July 2009.
NOTE: Data reporting prior to 2008 may not have been consistent with present practices.

Pedestrian Safety Trends per 100k Population



2014 fell below the pre-initiative average for total pedestrian and vehicle collisions, reversing a two year trend in the rise of total collisions. The data suggest the Pedestrian Safety Initiative continues to have success in reducing severe collisions (level 4 & 5), which have been in decline since the initiative began. Fatalities in 2014 were the second lowest recorded in a year since 2005.

High Incidence Areas



County High Incidence Area

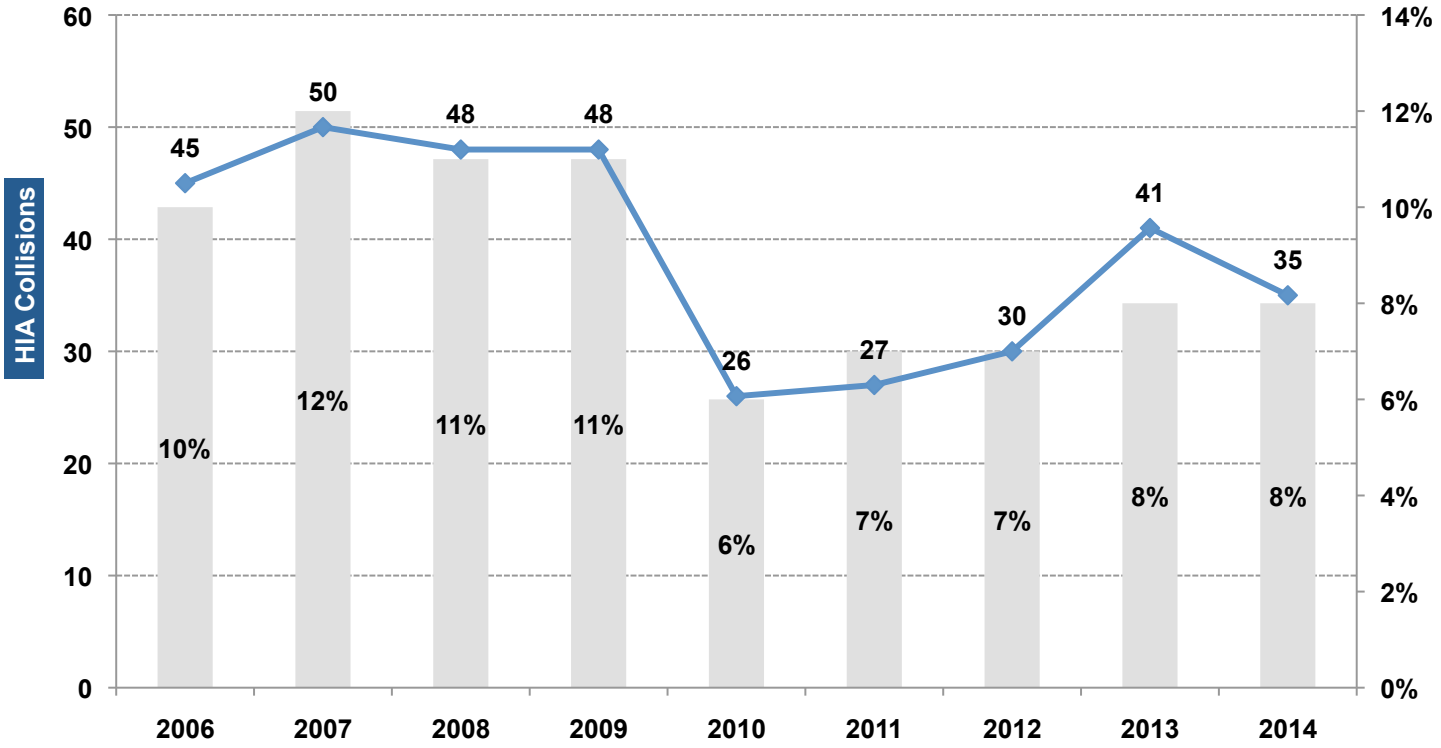
State High Crash Location

County/State Overlap

High Incidence Areas (HIAs) were identified in the early stages of the Pedestrian Safety Initiative based on historical collision trends. Using this data-driven approach, MCPD, DOT, and PIO target resources in these areas in order to make these areas safer for pedestrians and drivers. MDSHA has mirrored their program based on the county's model for identifying additional collision locations.

Source: MCPD

Collisions in High Incidence Areas by Year (1/2)



The number of collisions in High Incidence Areas (HIAs) fell 15% from 41 collisions in 2013 to 35 collisions in 2014. The percentage of collisions in HIAs as compared to the county total remained at 8%.

Collisions in High Incidence Areas by Year (2/2)

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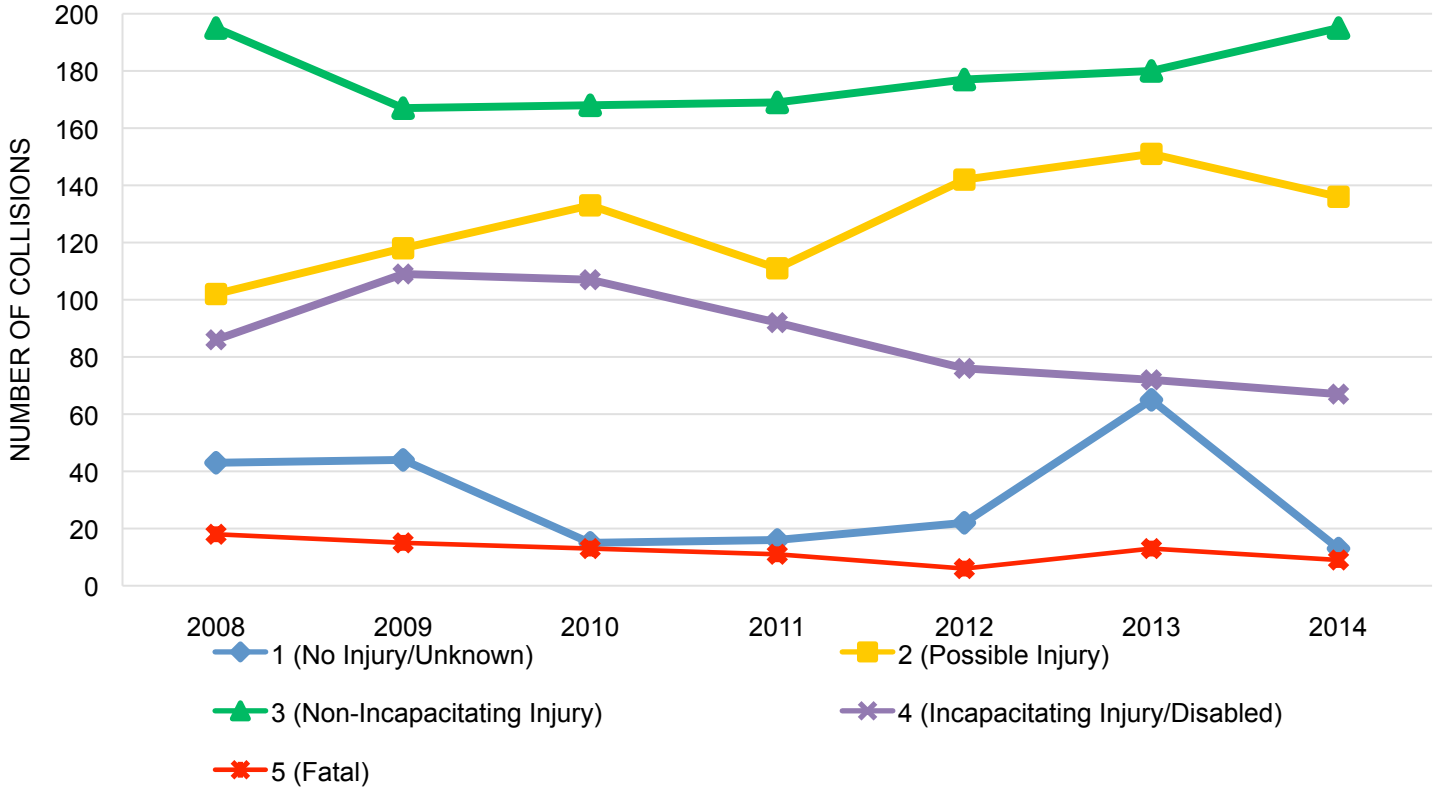
HIA	Number of Pedestrian Collisions												
	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total	Pre-Audit Average	Post-Audit Average	% Change
Piney Branch	10	8	7	8	3	5	9	8	5	63	9.0	6.3	-30%
Wisconsin	6	10	3	4	3	3	3	6	4	42	8.0	3.8	-52%
Georgia	7	5	7	10	4	4	2	11	7	57	6.3	5.6	-12%
Rockville Pike	4	3	9	8	2	3	2	4	4	39	5.3	3.0	-44%
Four Corners	4	7	5	0	1	3	0	3	2	25	4.0	2.0	-50%
Reedie	0	3	3	7	2	1	2	2	2	22	3.3	1.8	-46%
Randolph	2	1	4	4	1	2	3	1	0	18	2.8	1.5	-45%
Connecticut	4	5	6	2	2	3	3	3	2	30	3.8	2.7	-30%
Colesville	4	4	2	3	5	2	4	3	5	32	3.6	4.0	+11%
Old Georgetown	4	4	2	2	3	1	2	0	4	22	2.7	2.0	-25%
Total	45	50	48	48	26	27	30	41	35	350			

Key: Year of PRSA Audit | Increase in Collisions After Audit

Pedestrian Collisions by Highest Injury Level*



*Due to reporting practices, only the highest level injury is recorded. Highest injury level refers to the highest recorded pedestrian injury for a given collision (e.g. if two pedestrians are struck, and one has a level 3 injury and one has a level 1 injury, the collision is recorded as a level 3 collision).

Source: MCPD

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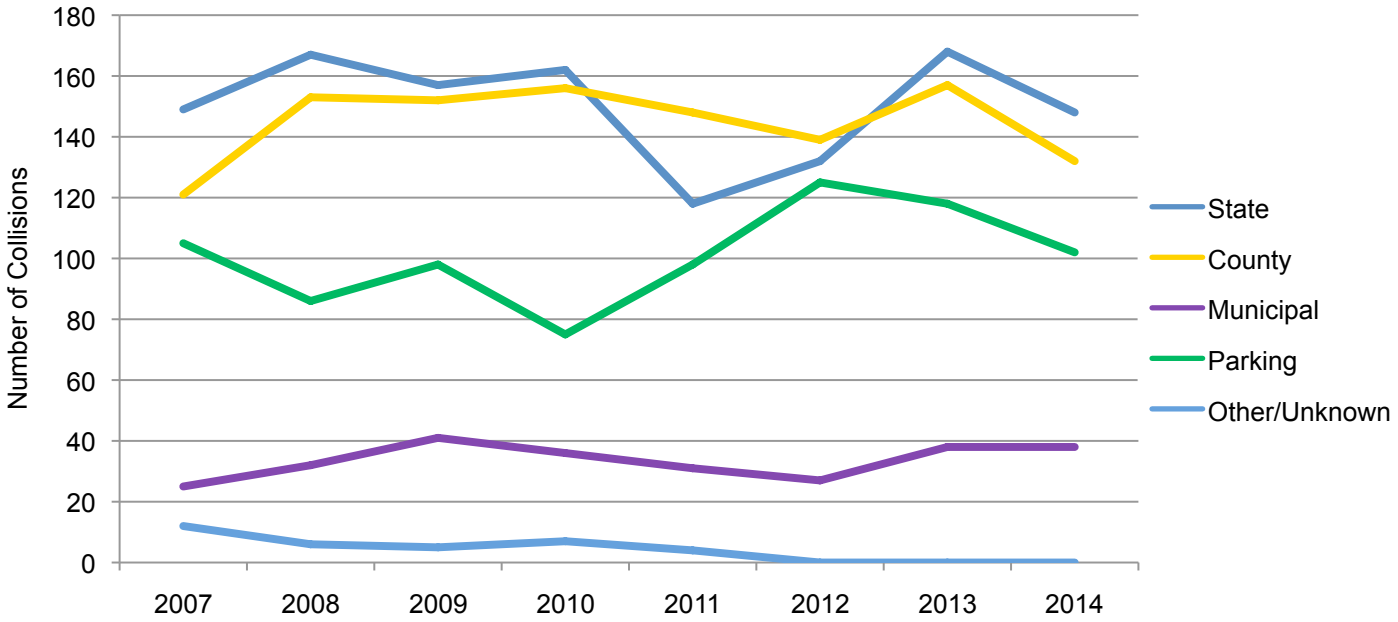
Performance Measurement and Management

From 2013 to 2014 there was a 13% drop in reported pedestrian collisions in Montgomery County. Level 1 (no injury) collisions dropped by 80% from 65 in 2013 to 13 in 2014. Level 5 (fatalities) dropped by 31% from 13 in 2013 to 9 in 2014. The only level with an increase year-over-year was level 3 (non-incapacitating injury) with an 8% increase from 180 in 2013 to 195 in 2014.

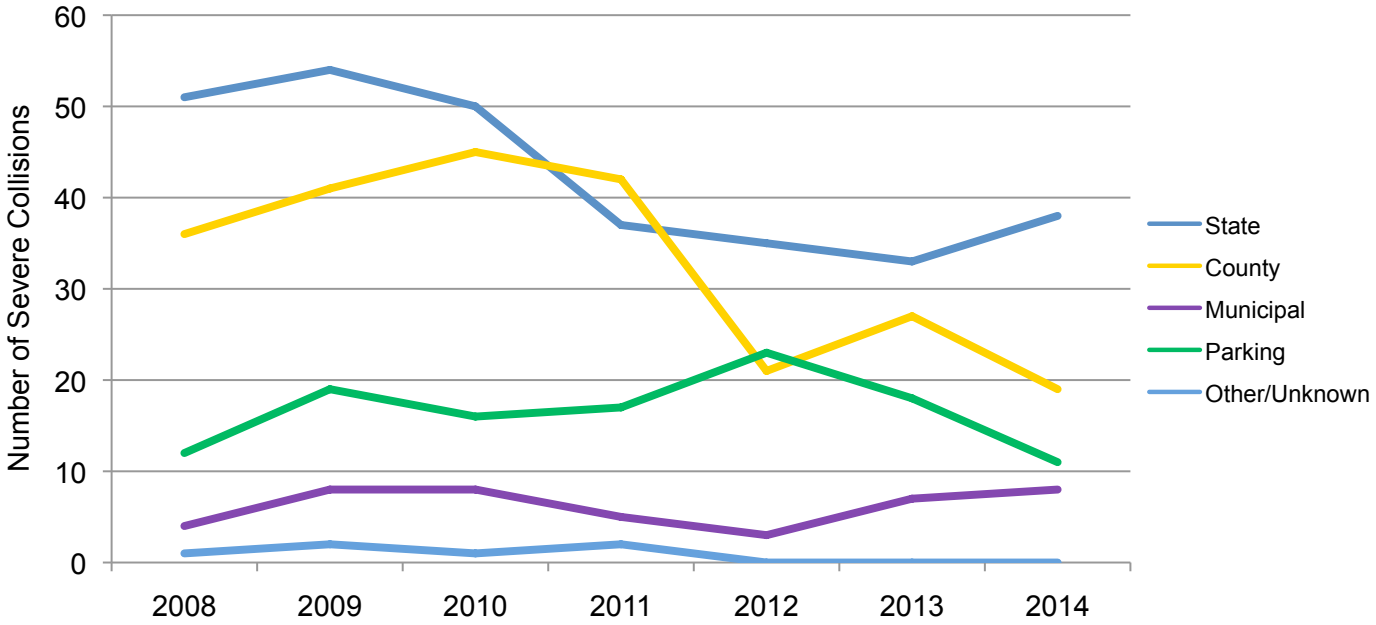
Collisions by Roadway Type



Highway Lane Miles				
State	County	Toll	Municipal	Total
1,395.14	4,846.58	88.01	761.36	7,091.09
20%	68%	1%	11%	100%

Collisions decreased for all roadway types except municipal which remained steady. Year-over-year collisions declined by 12%, 16%, and 14% for state, county, and parking lots respectively. Collisions on municipal roads (excluding Takoma Park) were consistent at 38 collisions each year.

Severe Collisions by Roadway Type

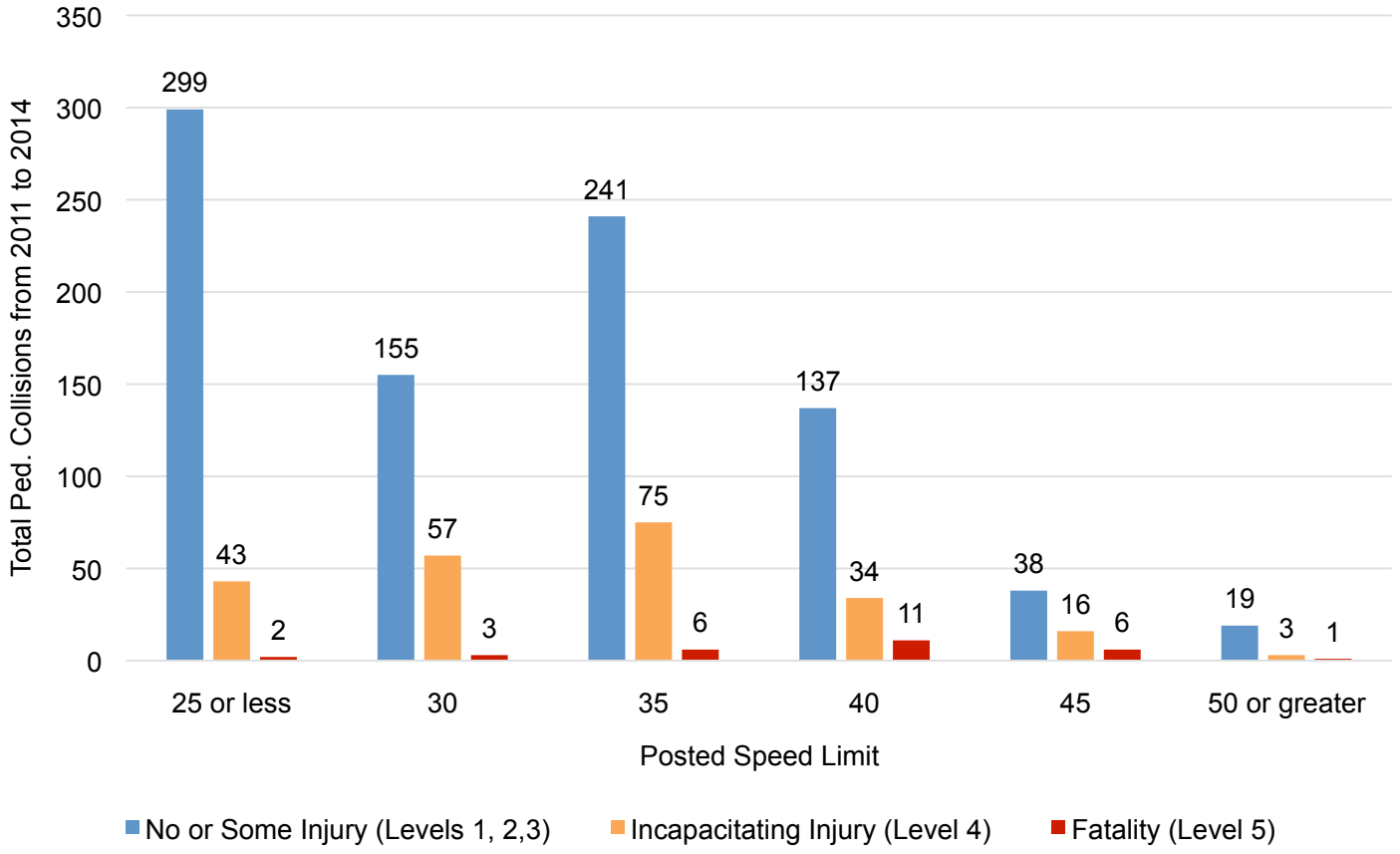


Highway Lane Miles				
State	County	Toll	Municipal	Total
1,395.14	4,846.58	88.01	761.36	7,091.09
20%	68%	1%	11%	100%

The amount of severe (level 4 and 5) collisions occurring on state roads dropped by 24% and county roads dropped by 58% from 2010 to 2014. However, from 2013 to 2014 severe collisions on state roads increased by 15%.

Severe collisions in parking lots have dropped by 52% since a peak in 2012.

Pedestrian Collisions by Posted Speed Limit from 2011 to 2014



Note: Only includes collisions occurring on county, state, and municipal roadways. Not adjusted for lane miles. Excludes collisions without speed limit data recorded. Uncollected speed data by year: 2011 (15%), 2012 (9%), 2013 (9%), and 2014 (6%).

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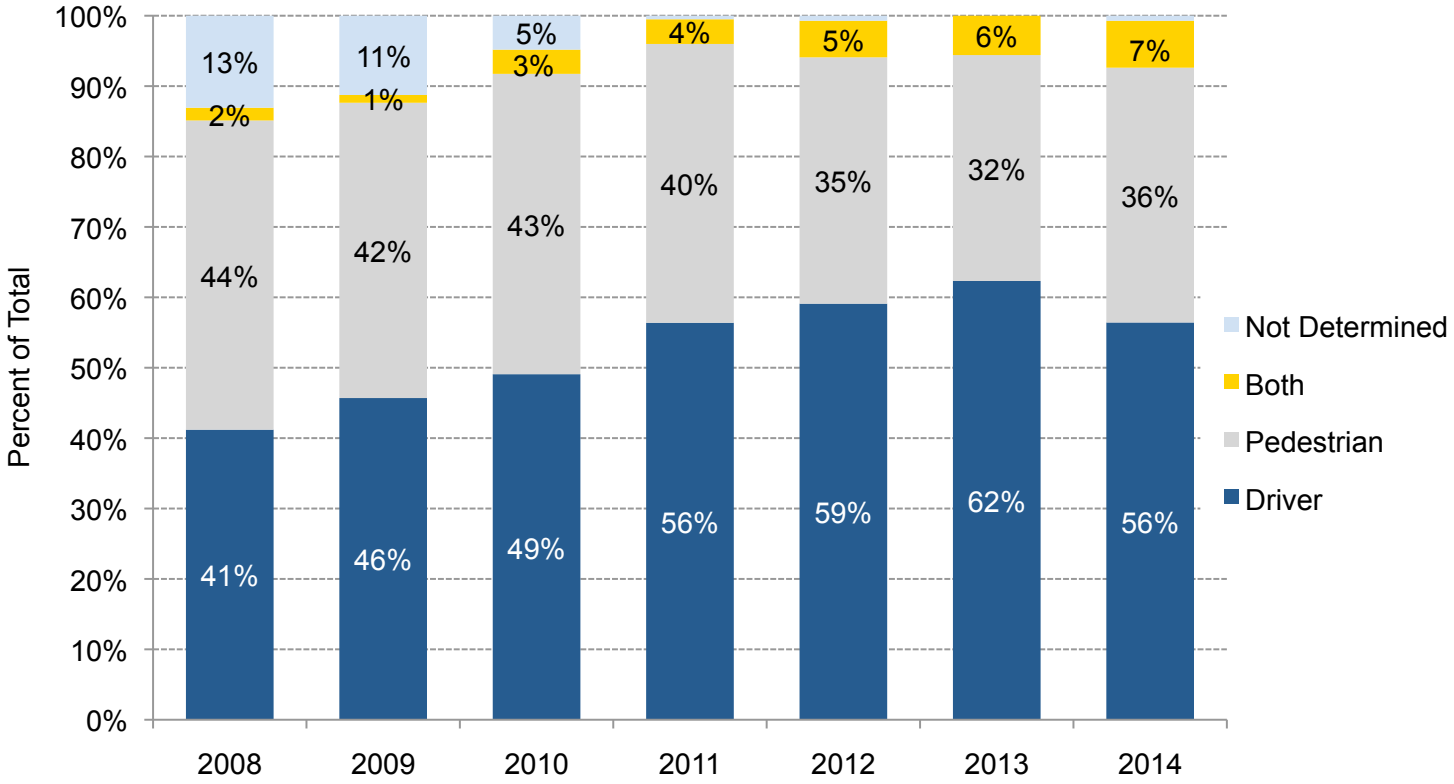
Roadways with speeds 35 mph or greater represented 83% of pedestrian fatalities from 2011 to 2014.

Speed Limit	% of Collisions that are Levels 4 & 5
25 or less	13%
30	28%
35	25%
40	25%
45	37%
50 or greater	17%

Source: MCPD

Party at Fault for Collision

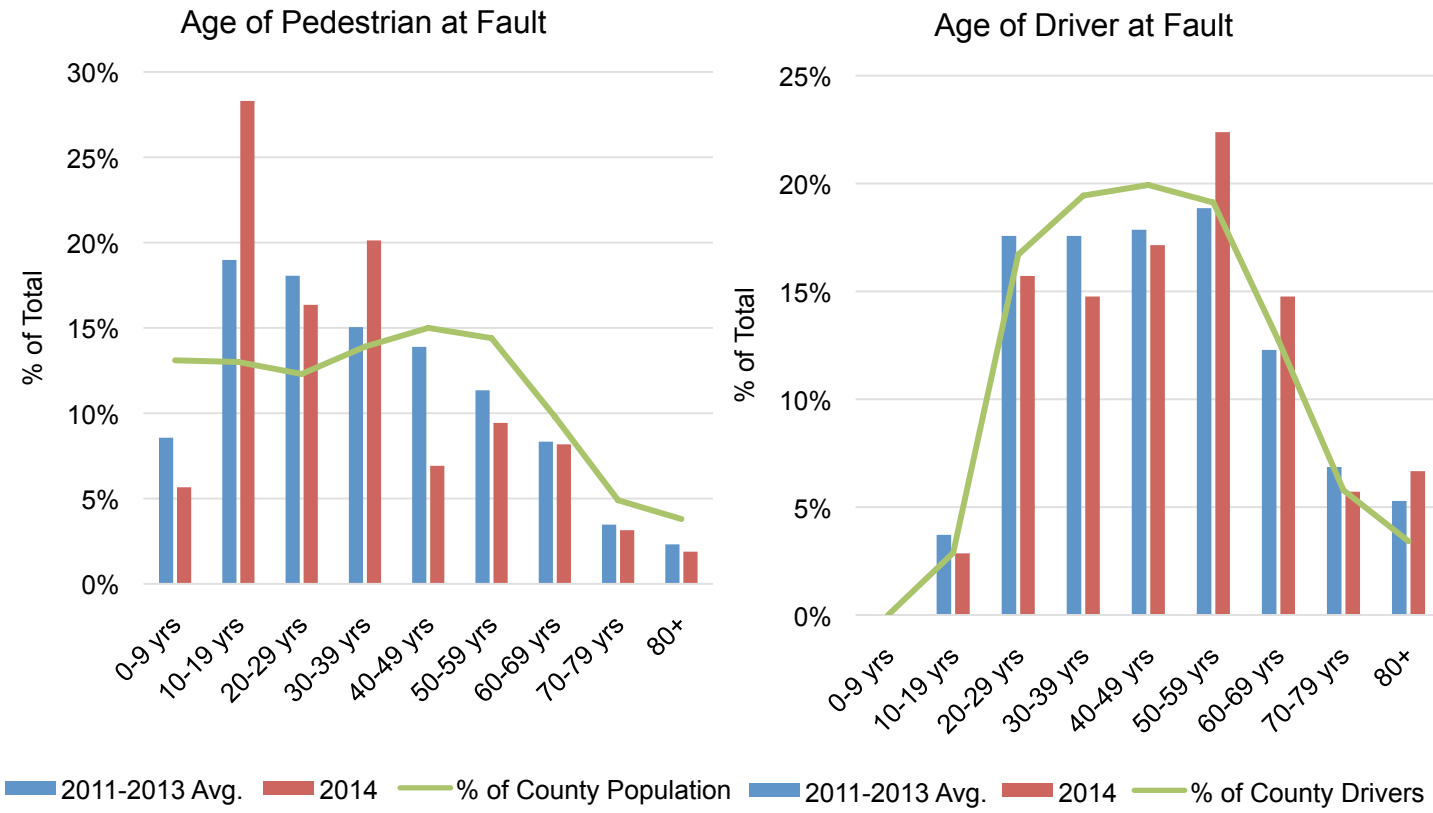


Note: numbers may not add to 100% due to rounding

The party at fault has been relatively stable over the past four years with drivers at fault 59% and pedestrians at fault 36% on average from 2011 to 2014.

Source: MCPD

Party at Fault by Age



Sources: MCPD, Census Bureau 2013 5-Year ACS Population Estimates, MD Highway Safety Office

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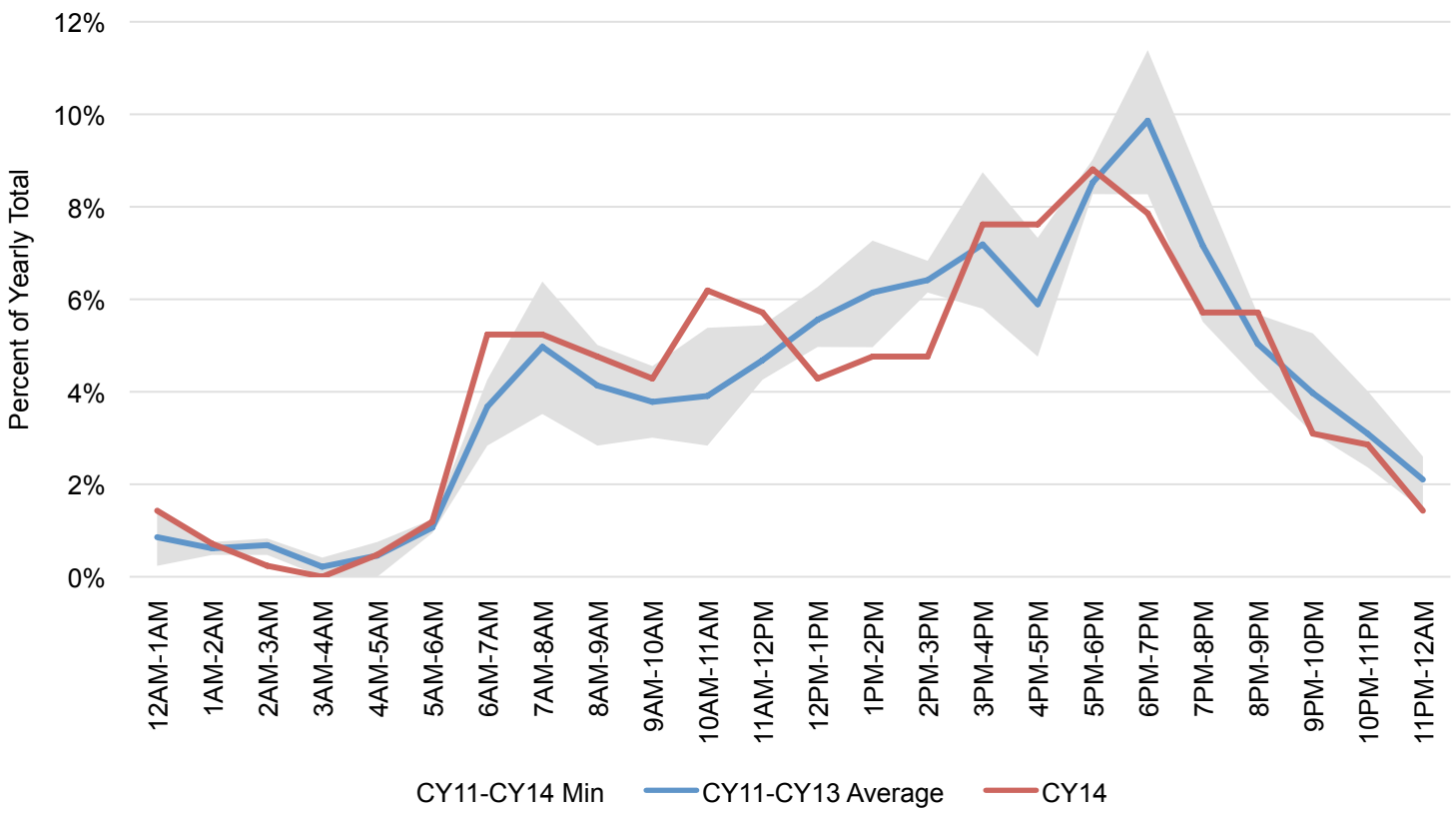
More pedestrians in the age ranges of 10-19 and 30-39 years of age were at fault in 2014 as compared to the last three years. The corresponding drop was in the 0-9 and 40-49 years of age ranges.

For drivers at fault, there were decreases for those under 49 and increases for each age group 50 and above except for the 70-79 years old group which was fairly steady.

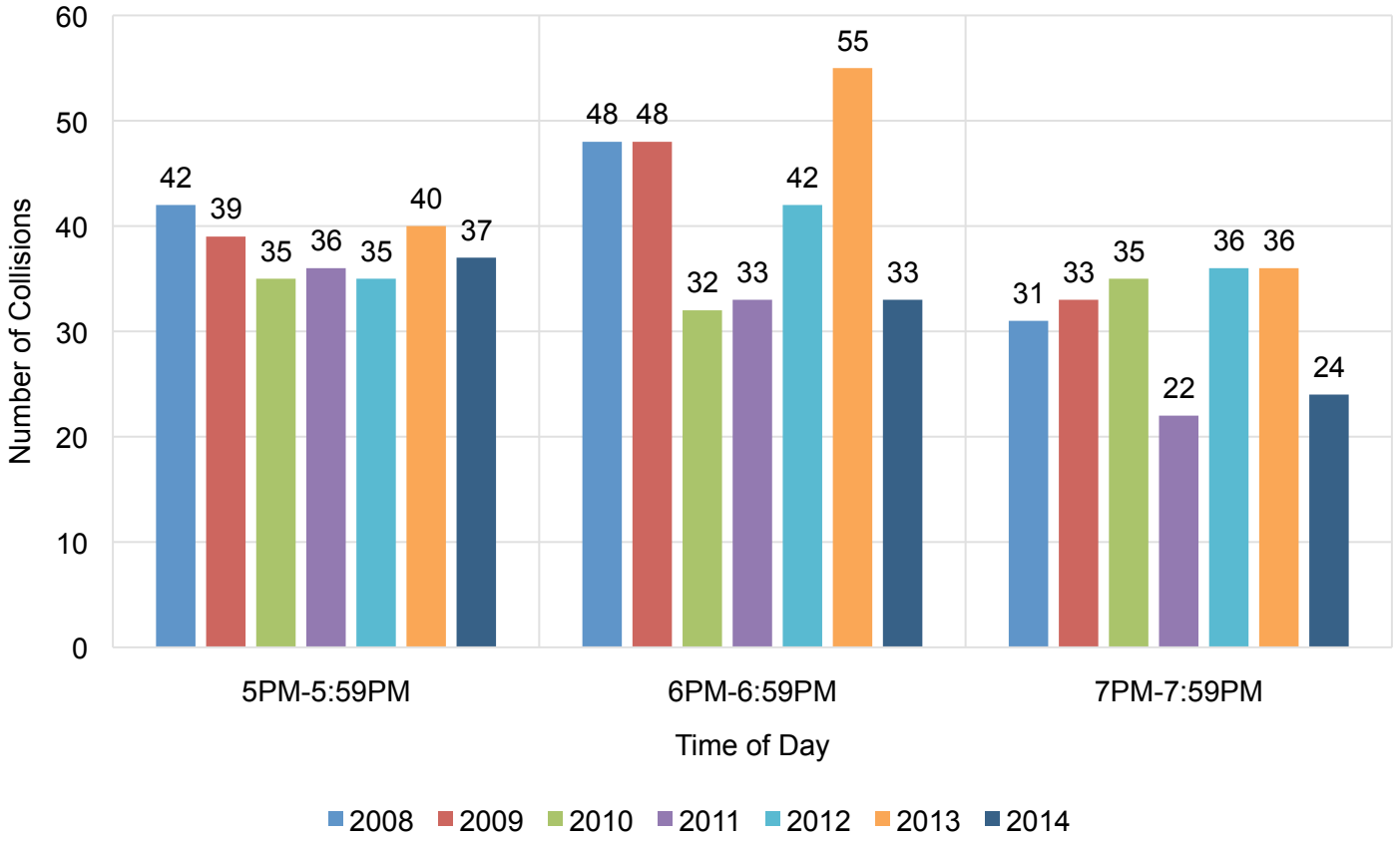
Pedestrian Collision Variables: Hour of Day



Over the last four years, collisions were consistently lowest during the 3AM-5AM hours and were highest between 5PM-8PM. In 2014, collisions for the evening rush peaked during the 5PM hour and were lower than average from 6-8 PM.

Source: MCPD

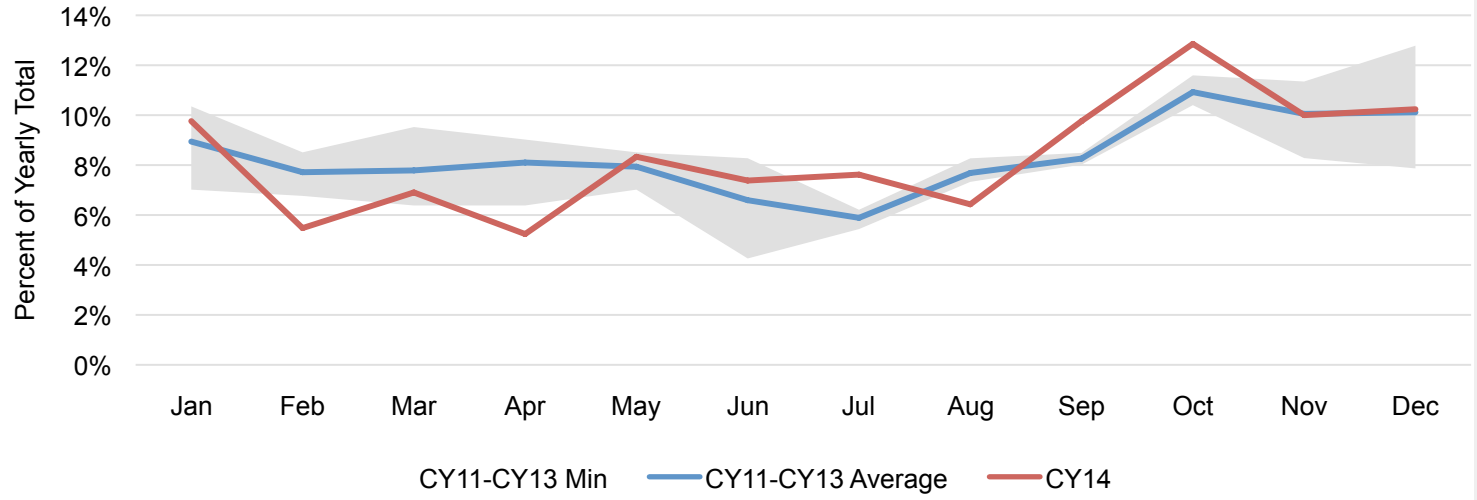
Collisions from 5PM-8PM

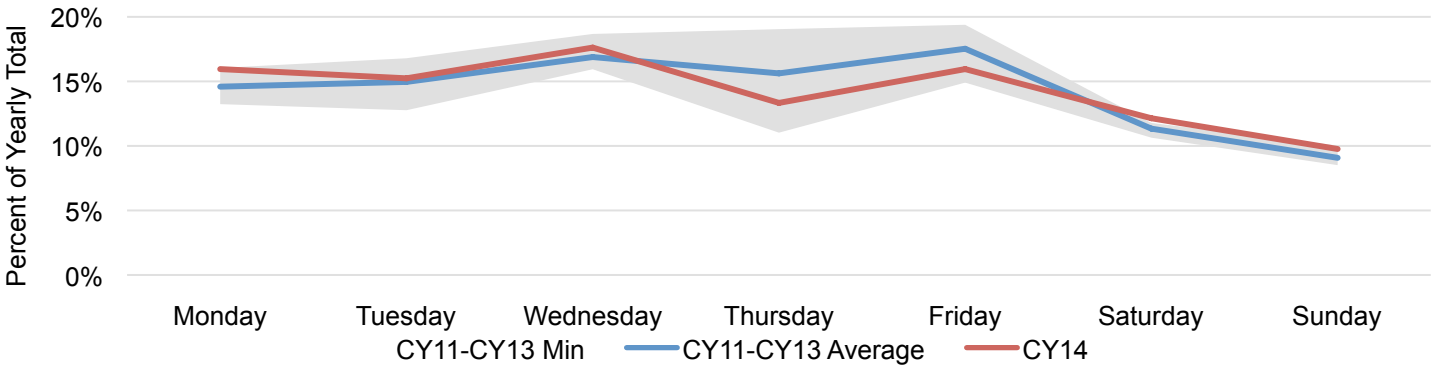


Source: MCPD

Collisions in Montgomery County peak between the hours of 5 and 8PM. These hours contained 18% of all collisions from 2008-2014. This ratio has been largely consistent since 2008.

Pedestrian Collision Variables: Month and Day





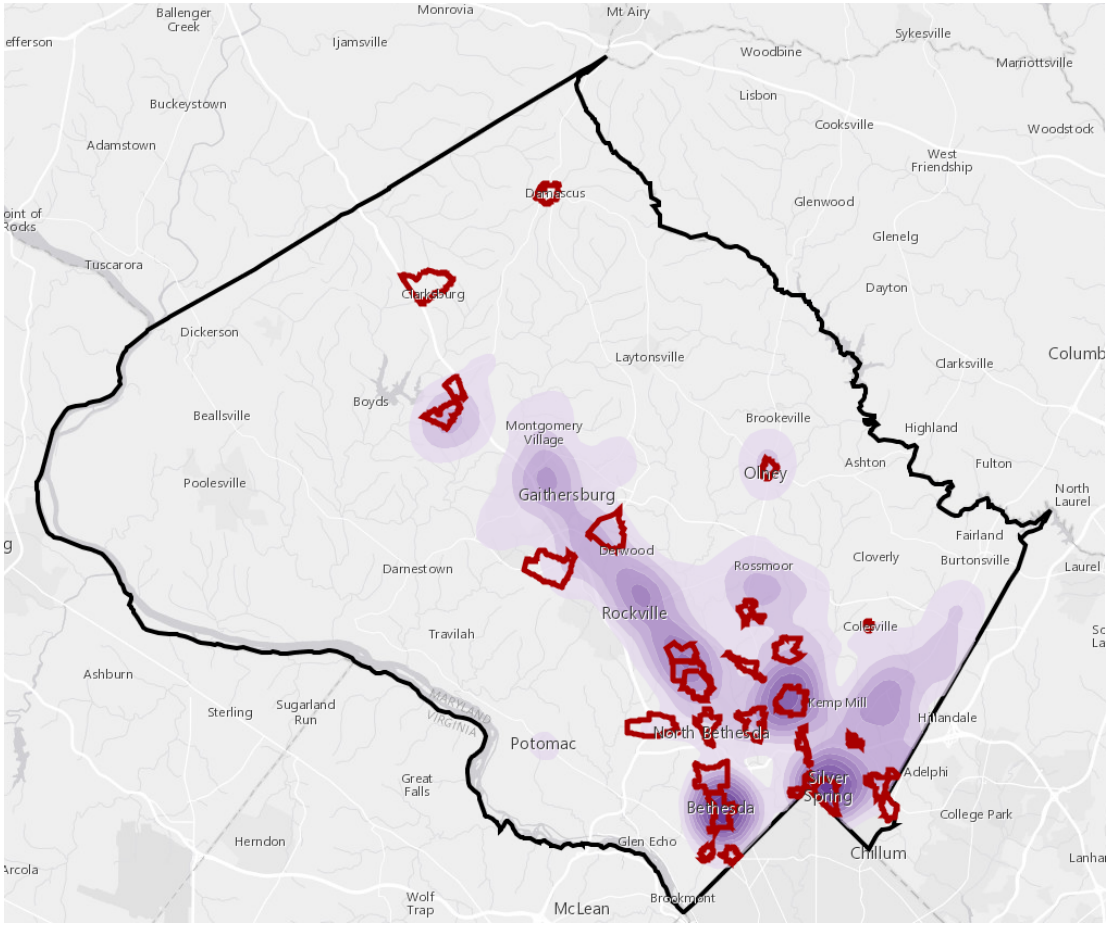
Over the past four calendar years, October through January represented 41% of pedestrian vehicle collisions.

As reported last year, pedestrian collisions correlate with less hours of daylight.

The weekend continues to have fewer collisions as compared to weekdays with Sunday being the day with the fewest collisions for each of the past four years.

Source: MCPD

2014 Pedestrian Collisions by Density

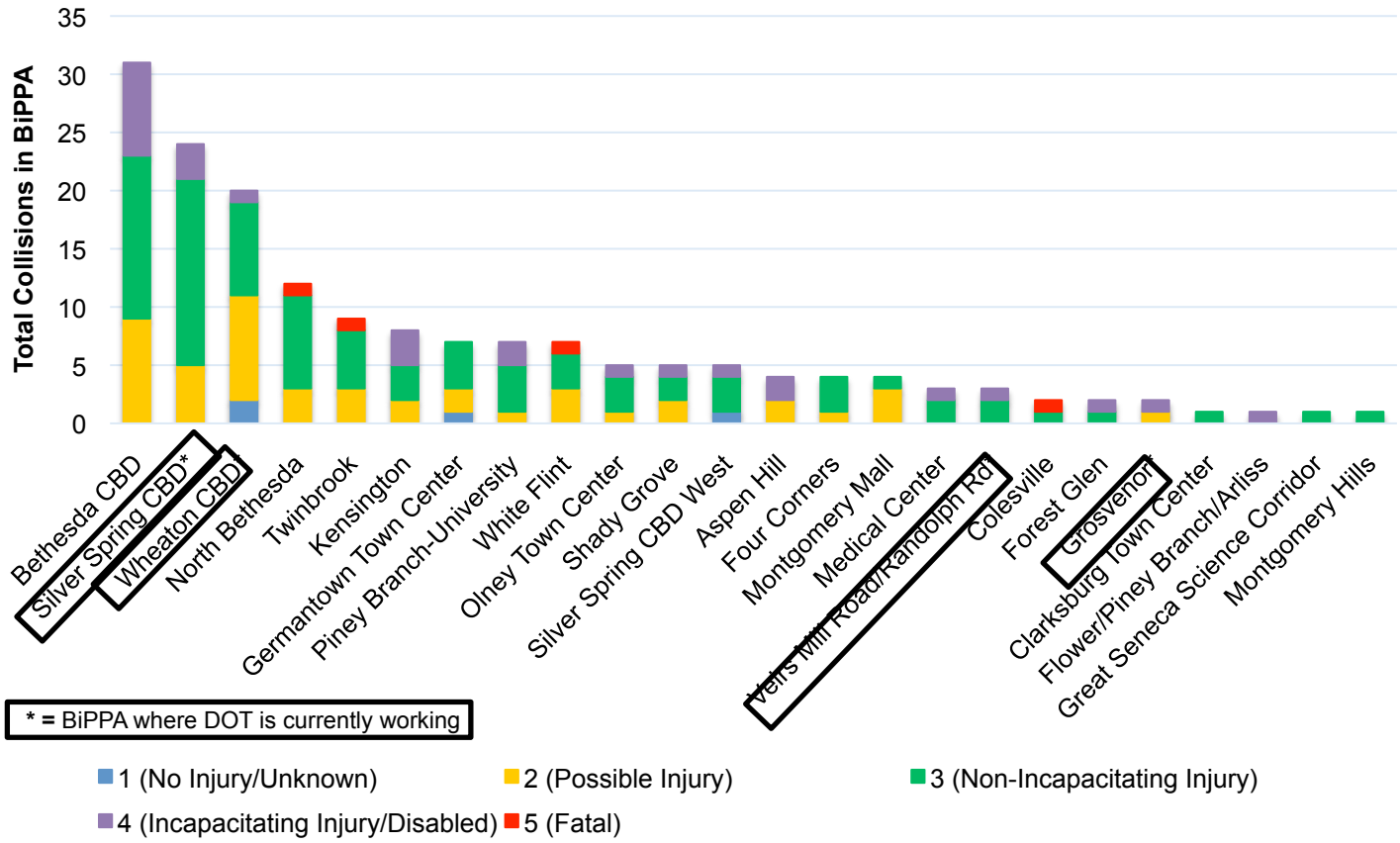


The map on the left displays the areas in the county with the highest number of collisions overlaid with the county's Bicycle Pedestrian Priority Areas (BiPPAs). Overall, the BiPPAs are located where the collisions are occurring. There are no BiPPAs in the municipalities.

DOT is currently working in the following BiPPAs: Silver Spring CBD, Wheaton CBD, Viers Mill and Randolph Road, Grosvenor, and Glenmont.

Source: MCPD

2014 Pedestrian Collisions by BiPPA



Note: BiPPAs without a recorded collision in 2014 are not shown in the above chart. That includes the following areas: Cloverleaf, Damascus, Friendship Heights, Glenmont, and Westbard.

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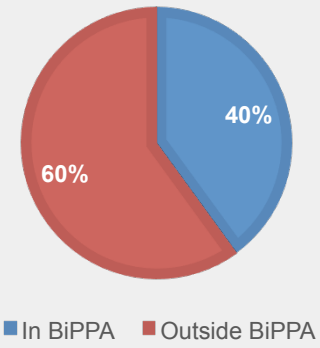
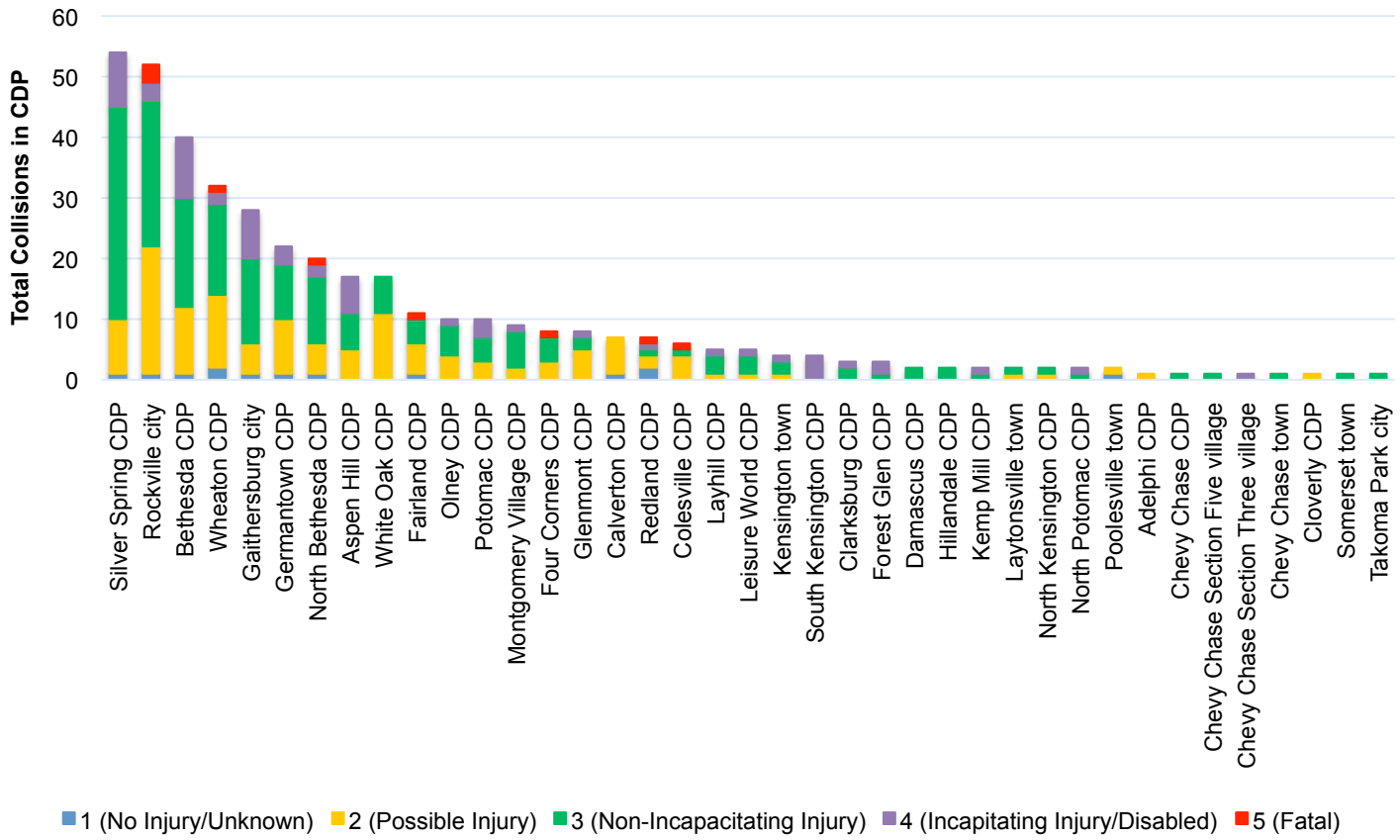
While the Bicycle and Pedestrian Priority Areas (BiPPAs) only cover 3% of the land area in the County, they contained **40%** of all 2014 pedestrian collisions and 4 out of 9 pedestrian fatalities. The Bethesda, Silver Spring, and Wheaton Central Business Districts contained 18% of all 2014 pedestrian collisions.



Source: MCPD

2014 Pedestrian Collisions by CDP



Note: The above chart excludes any census designated places (CDP) with zero recorded collisions.

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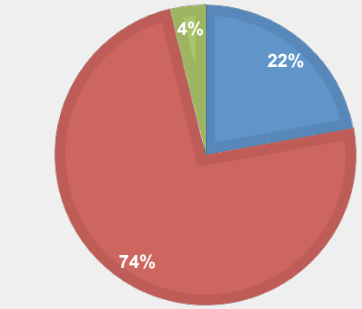
22% of the collisions in Montgomery County occurred in incorporated cities, towns, and villages with Rockville accounting for 12% of all collisions.



Source: MCPD

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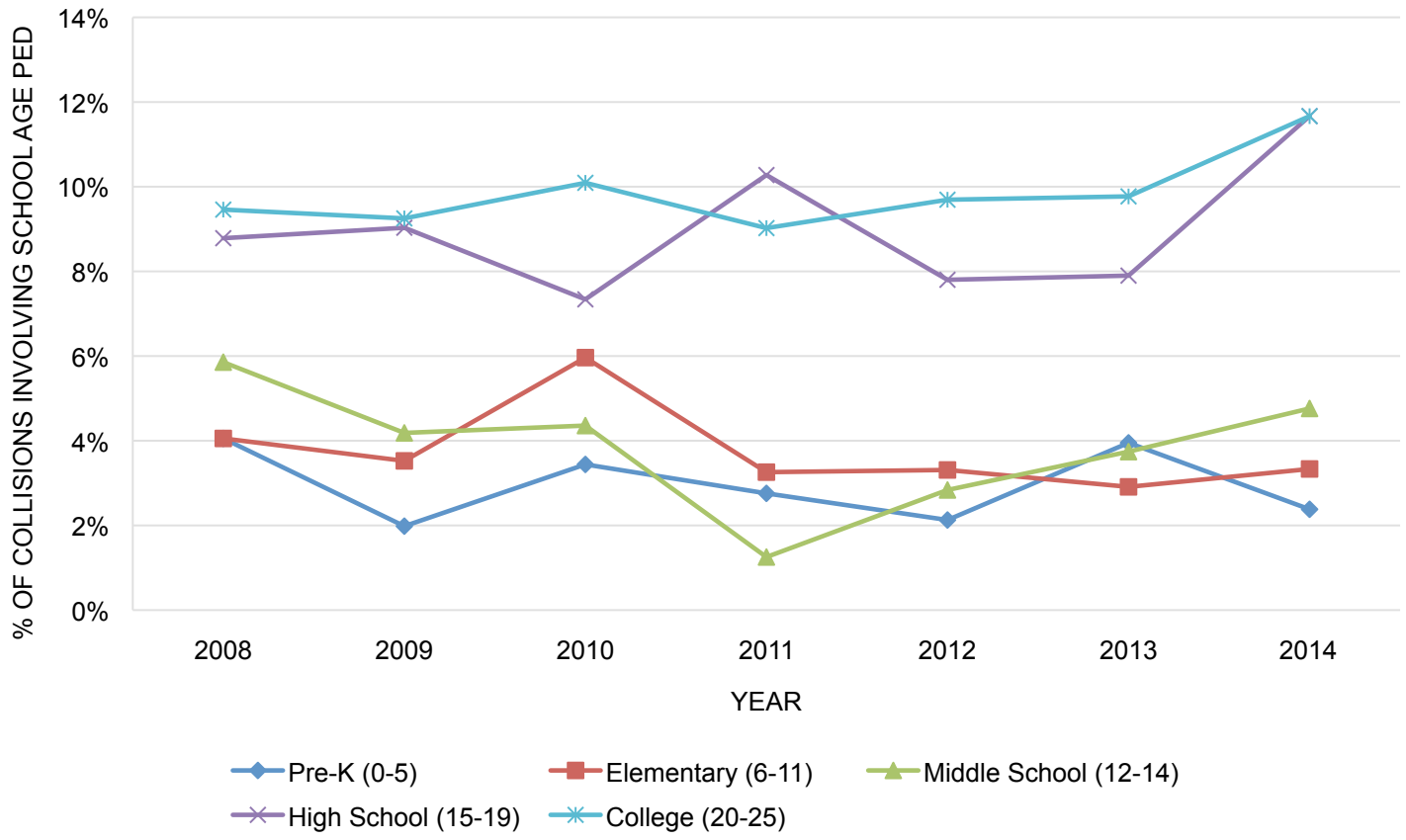
Collision Trends Around Public

Countywide Collisions Involving School Age Pedestrians As a Percentage of All Pedestrian/Vehicle Collisions



Source:
MCPD

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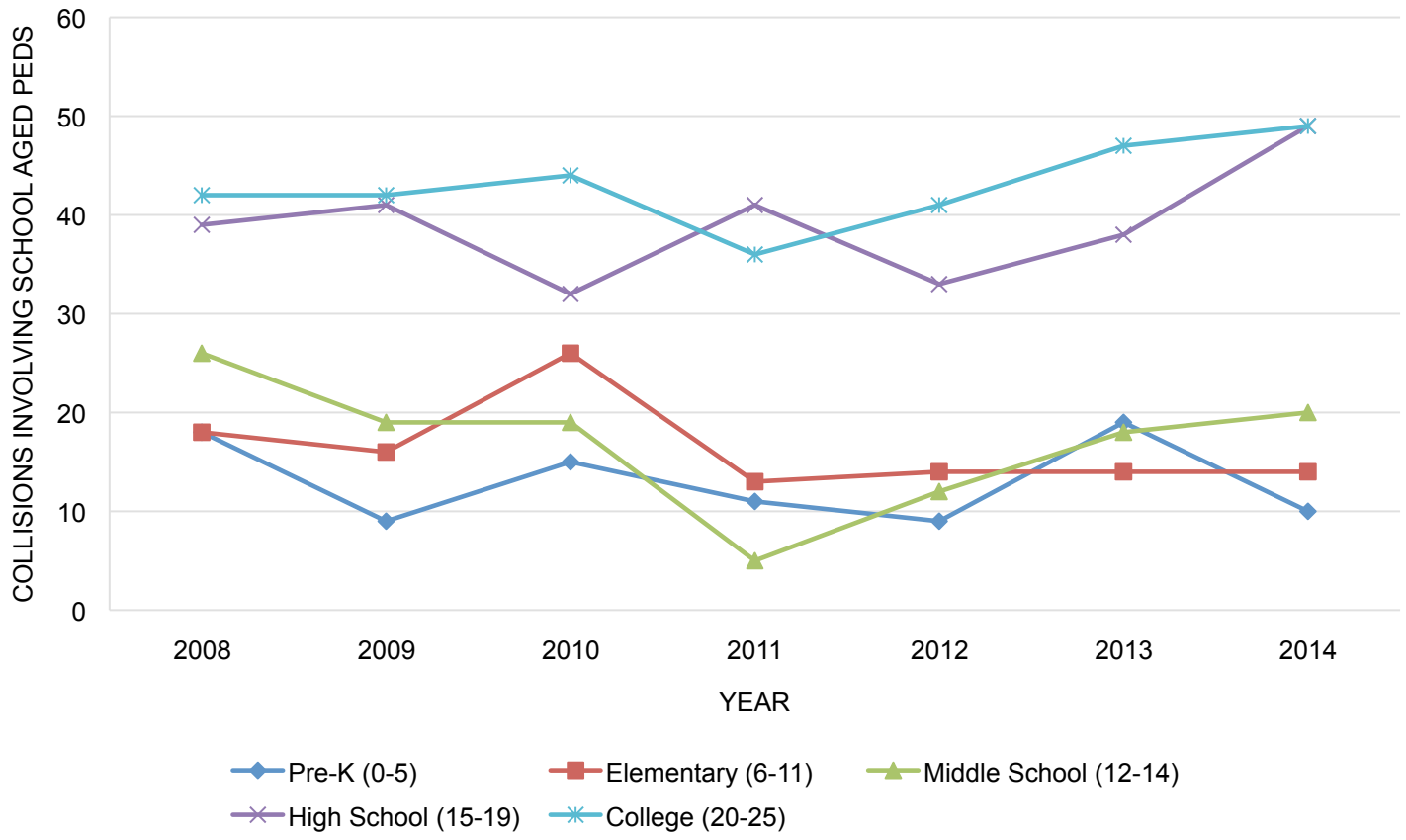
Middle, High, and College aged pedestrians have been increasing as a share of all pedestrians involved in collisions since 2012, although some of the increase could be due to improved recording of pedestrian ages by MCPD.

Year	% of Peds with No DOB Info.
2008	14%
2009	9%
2010	14%
2011	14%
2012	28%
2013	3%
2014	0%

Countywide Collisions Involving School Age Pedestrians

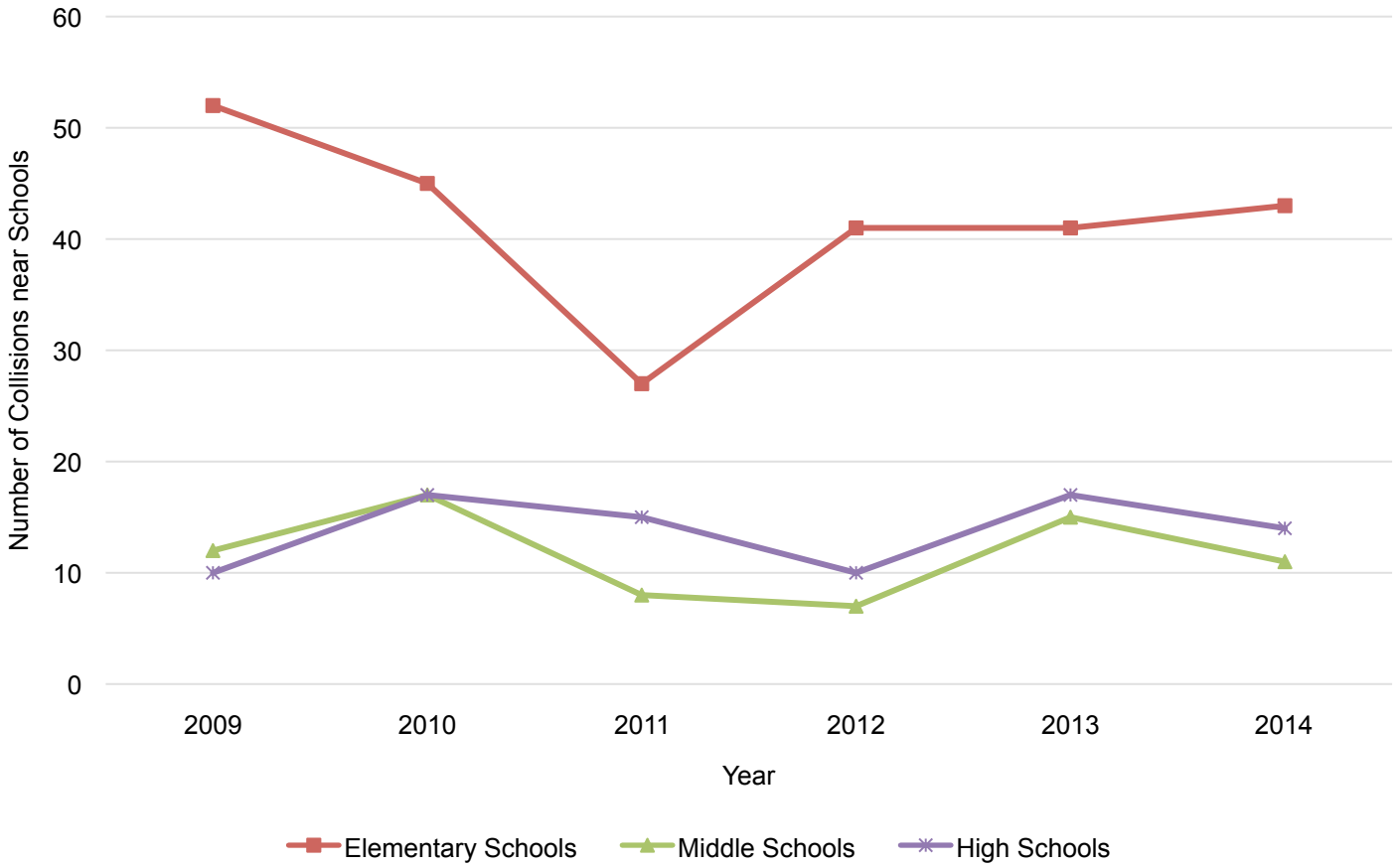


Source:
MCPD

The number of collisions involving Middle, High, and College aged pedestrians has been increasing since 2012, although some of the increase could be due to improved recording of pedestrian ages by MCPD.

Year	% of Peds with No DOB Info.
2008	14%
2009	9%
2010	14%
2011	14%
2012	28%
2013	3%
2014	0%

Ped. Collisions Within ¼ Mile of Public Schools

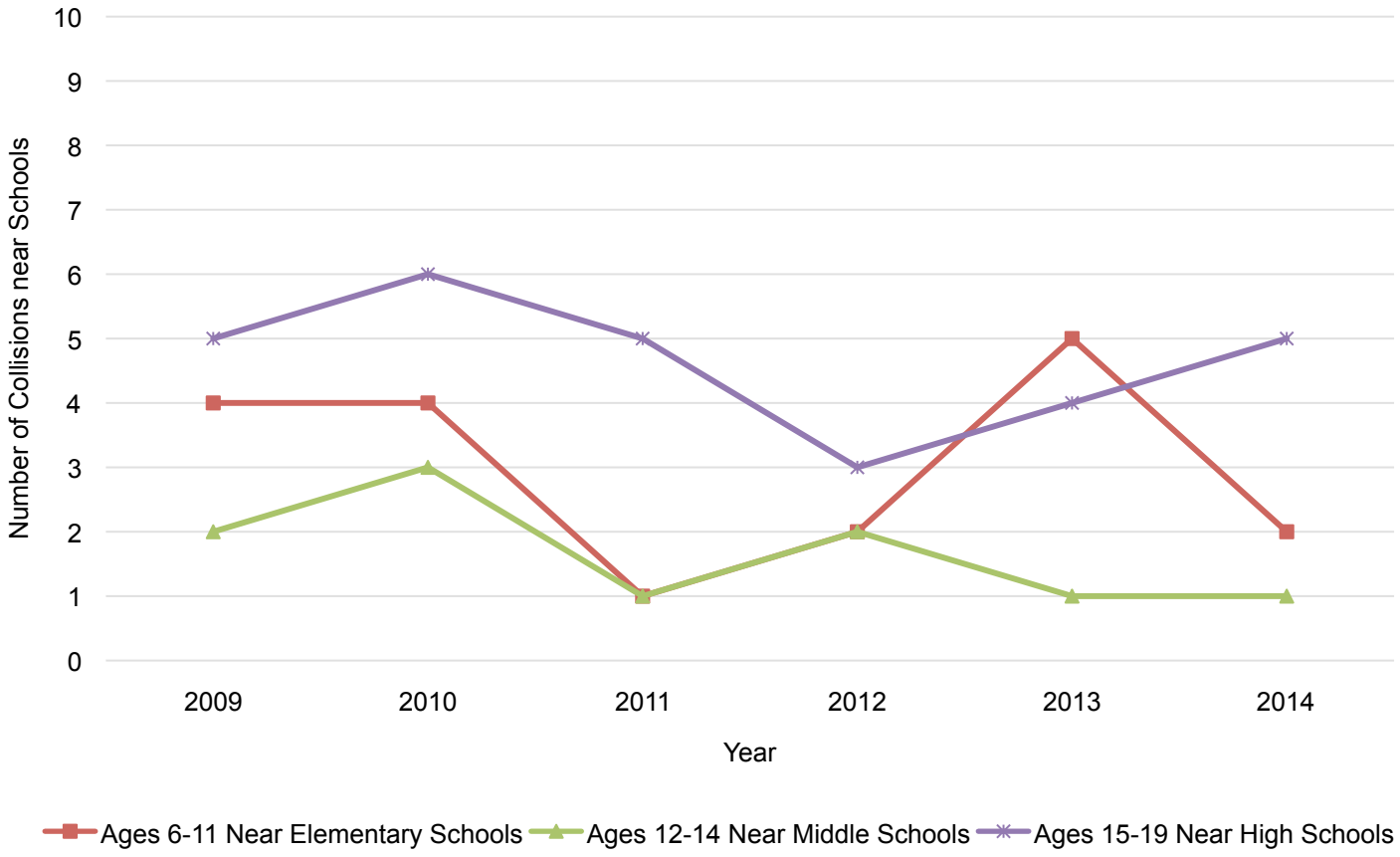


From 2013 to 2014, collisions were up 5% around elementary schools, down 35% around middle schools and down 18% around high schools. However, collisions are still above the low marks in 2011 and 2012.

Year	Collisions w/ School-Aged Ped. Near School	All Collisions Near Schools
2009	11	74
2010	13	79
2011	7	50
2012	7	58
2013	10	73
2014	8	68

MCPD

Ped. Collisions Within ¼ Mile of Public Schools: School Aged Pedestrians Only



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For collisions within a quarter mile of a public school, 14% involve a school-aged pedestrian on average from 2009 to 2014.

Year	Collisions w/ School-Aged Ped. Near School	All Collisions Near Schools
2009	11	74
2010	13	79
2011	7	50
2012	7	58
2013	10	73
2014	8	68

MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Bethesda	10	2	1	5	6	8	32	5.3	0% (0)
New Hampshire Estates	6	5	0	6	5	5	27	4.5	7% (2)
Gaithersburg	3	3	0	0	3	2	11	1.8	18% (2)
Glenallan	0	1	2	4	3	1	11	1.8	0% (0)
South Lake	0	2	2	3	2	1	10	1.7	10% (1)
Olney	1	3	1	1	1	1	8	1.3	0% (0)
Harmony Hills	1	2	1	1	1	1	7	1.2	0% (0)
Burnt Mills	0	1	1	0	2	2	6	1.0	0% (0)
Forest Knolls	0	1	0	2	2	1	6	1.0	0% (0)
Greencastle	1	0	1	1	1	2	6	1.0	17% (1)
Rock Creek Forest	3	1	0	1	0	1	6	1.0	0% (0)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

CountyStat
Performance Measurement and Management

Of the 11 elementary schools with the highest number of collisions around them, only 4 schools had collisions involving elementary school aged children.

Note: Not all schools are shown here. See appendix for full list.

Source: MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians Age 6-11

CountyStat
Performance Measurement and Management

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions
Gaithersburg	0	0	0	0	1	1	2	0.3
New Hampshire Estates	1	0	0	0	1	0	2	0.3
Beverly Farms	0	0	0	0	1	1	2	0.3
Highland View	0	0	0	1	0	0	1	0.2
Rosemary Hills	0	1	0	0	0	0	1	0.2
Rock View	1	0	0	0	0	0	1	0.2
Clearspring	0	1	0	0	0	0	1	0.2
Waters Landing	1	0	0	0	0	0	1	0.2
Fox Chapel	0	0	1	0	0	0	1	0.2
Greenwood	0	1	0	0	0	0	1	0.2
South Lake	0	0	0	1	0	0	1	0.2
East Silver Spring	1	0	0	0	0	0	1	0.2
JoAnn Leleck	0	1	0	0	0	0	1	0.2
Page	0	0	0	0	1	0	1	0.2
Greencastle	0	0	0	0	1	0	1	0.2

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

Gaithersburg ES had 2 out of the 11 collisions within a ¼ mile involve elementary age pedestrians.

Beverly Farms also had 2 collisions involving elementary age pedestrians, but only had 3 collisions total within a ¼ mile of the school. The 3rd collision involved a 15 year old pedestrian.

Source: MCPD

Collisions Within ¼ Mile of Middle Schools: Pedestrians of All Ages

Middle School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 12-14
Argyle	0	2	1	1	2	4	10	1.6	20% (2)
Clemente	2	1	1	1	1	0	6	1.0	33% (2)
Lakelands Park	2	2	1	0	1	0	6	1.0	17% (1)
Loiederman	1	1	2	0	1	0	5	0.8	0% (0)
Montgomery Village	2	1	0	1	1	0	5	0.8	20% (1)
Wood	1	2	0	0	0	2	5	0.8	0% (0)
White Oak	1	1	0	0	0	2	4	0.7	0% (0)
Eastern	0	0	0	1	2	0	3	0.5	0% (0)
Neelsville	1	1	1	0	0	0	3	0.5	0% (0)
Shady Grove	0	1	0	2	0	0	3	0.5	0% (0)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

CountyStat
Performance Measurement and Management

4 out of the 10 middle schools with the highest average pedestrian collisions between 2009 and 2014 participated in Safe Routes to Schools.

Note: Not all schools are shown here. See appendix for full list.

Source: MCPD

Collisions Within ¼ Mile of Middle Schools: Pedestrians Age 12-14

CountyStat
Performance Measurement and Management

Middle School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions
Argyle	0	0	0	0	1	1	2	0.3
Clemente	0	0	1	1	0	0	2	0.3
King	0	1	0	0	0	0	1	0.2
Lakelands Park	0	1	0	0	0	0	1	0.2
Montgomery Village	1	0	0	0	0	0	1	0.2
Parkland	0	0	0	1	0	0	1	0.2
Parks	1	0	0	0	0	0	1	0.2
Westland	0	1	0	0	0	0	1	0.2

4 out of the 8 middle schools with a recorded middle-school aged collision have been involved in Safe Routes to School.

Argyle and King Middle Schools have recorded a middle-school aged pedestrian struck near the school since the SRTS grant ended.

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

Source: MCPD

Collisions Within ¼ Mile of High Schools: Pedestrians of All Ages

High School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 15-19
Blair	1	1	4	1	4	4	15	2.5	13% (2)
Bethesda Chevy Chase	1	2	1	1	2	3	10	1.7	20% (2)
Kennedy	0	1	1	2	3	1	8	1.3	38% (3)
Northwood	0	2	0	1	2	2	7	1.2	14% (1)
Quince Orchard	2	2	0	0	2	1	7	1.2	14% (1)
Montgomery	0	3	0	0	2	0	5	0.8	80% (4)
Thomas Edison	2	1	1	1	0	0	5	0.8	0% (0)
Wheaton	2	1	1	1	0	0	5	0.8	0% (0)
Gaithersburg	2	1	0	1	0	0	4	0.7	50% (2)
Seneca Valley	0	0	1	0	1	1	3	0.5	33% (1)
Springbrook	1	1	0	1	0	0	3	0.5	67% (2)
Wootton	0	1	1	1	0	0	3	0.5	67% (2)

CountyStat
Performance Measurement and Management

The two high schools with the highest number of collisions near the schools are located inside BiPPAs and in proximity to a county HIA.

High Schools do not participate in the Safe Route to Schools grant program.

The county YOLO campaign targeted at high school students was rolled out in September 2014.

Note: Not all schools are shown here. See appendix for full list.

Source: MCPD

Collisions Within ¼ Mile of High Schools: Pedestrians Age 15-19

High School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions
Montgomery	0	2	0	0	2	0	4	0.7
Kennedy	0	0	1	1	1	0	3	0.5
Bethesda Chevy Chase	0	1	0	0	0	1	2	0.3
Johnson	0	1	0	0	0	1	2	0.3
Wootton	0	1	1	0	0	0	2	0.3
Gaithersburg	2	0	0	0	0	0	2	0.3
Blair	1	0	1	0	0	0	2	0.3
Springbrook	1	0	0	1	0	0	2	0.3
Poolesville	0	0	0	0	0	1	1	0.2
Churchill	1	0	0	0	0	0	1	0.2
Clarksburg	0	0	0	1	0	0	1	0.2
Damascus	0	0	1	0	0	0	1	0.2
Seneca Valley	0	0	0	0	0	1	1	0.2
Quince Orchard	0	0	0	0	0	1	1	0.2
Watkins Mill	0	0	0	0	1	0	1	0.2
Einstein	0	0	1	0	0	0	1	0.2
Northwood	0	1	0	0	0	0	1	0.2

4 out of 5 collisions around Richard Montgomery HS involved a high school aged pedestrian.

High Schools do not participate in the Safe Route to Schools grant program.

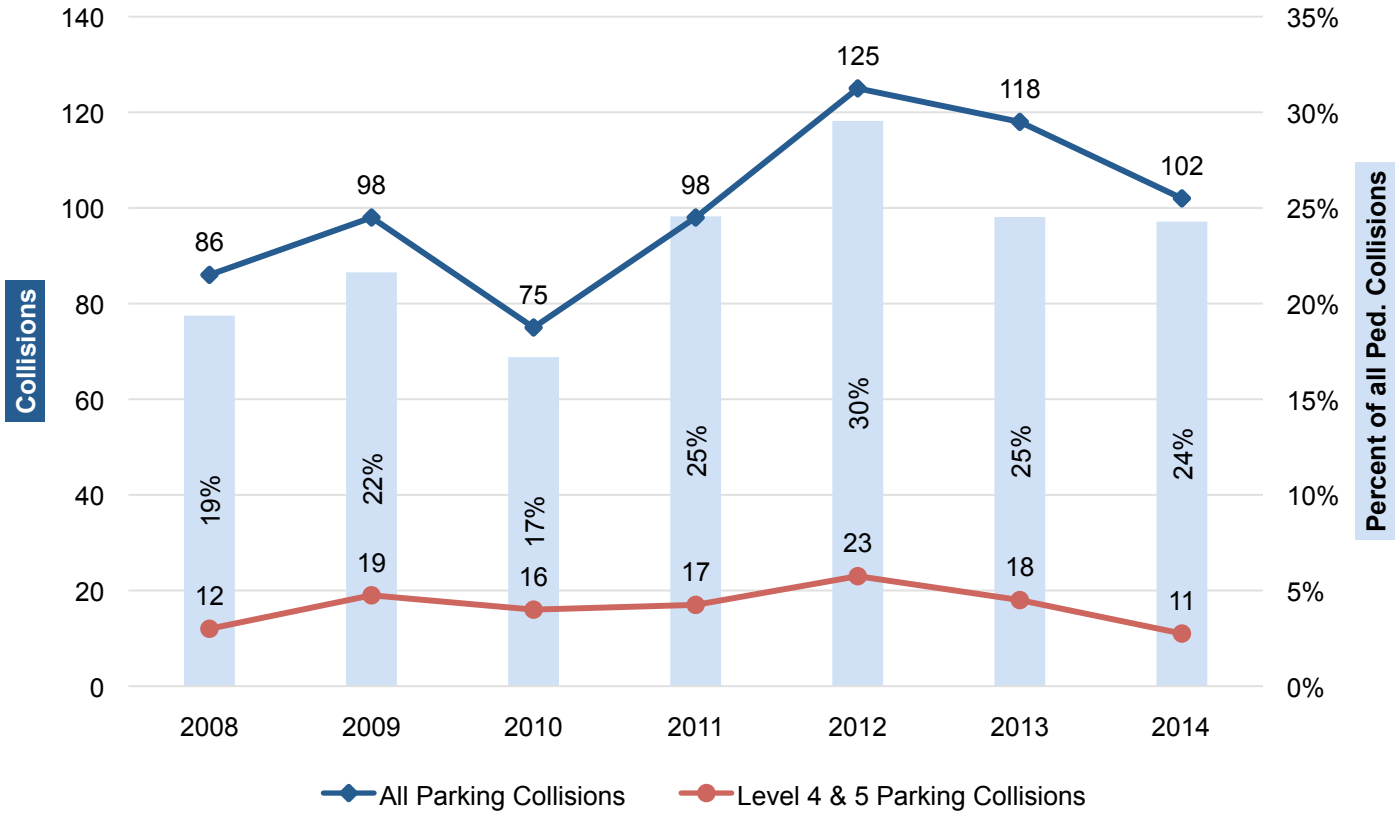
The county YOLO campaign targeted at high school students was rolled out in September 2014.

Source: MCPD

CountyStat
Performance Measurement and Management

Parking Lot Collisions

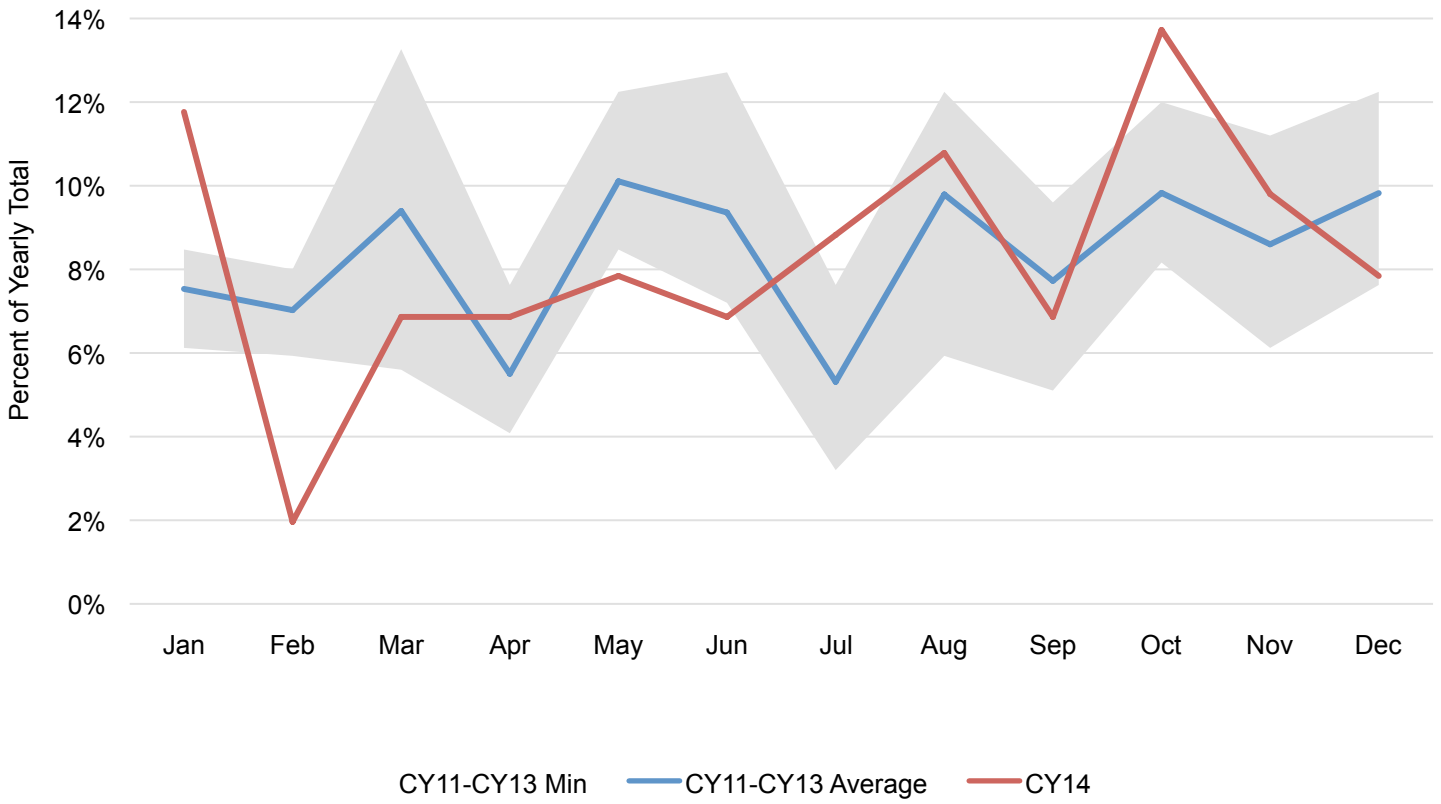
Collisions in Parking Lots/Garages by Year



There were 16 fewer pedestrian collisions occurring in parking lots from 2013 to 2014, a 14% decline. However, the amount of parking lot collisions as a percentage of all pedestrian collisions remained steady from 2013 to 2014.

Source: MCPD

Collisions in Parking Lots/Garages by Month

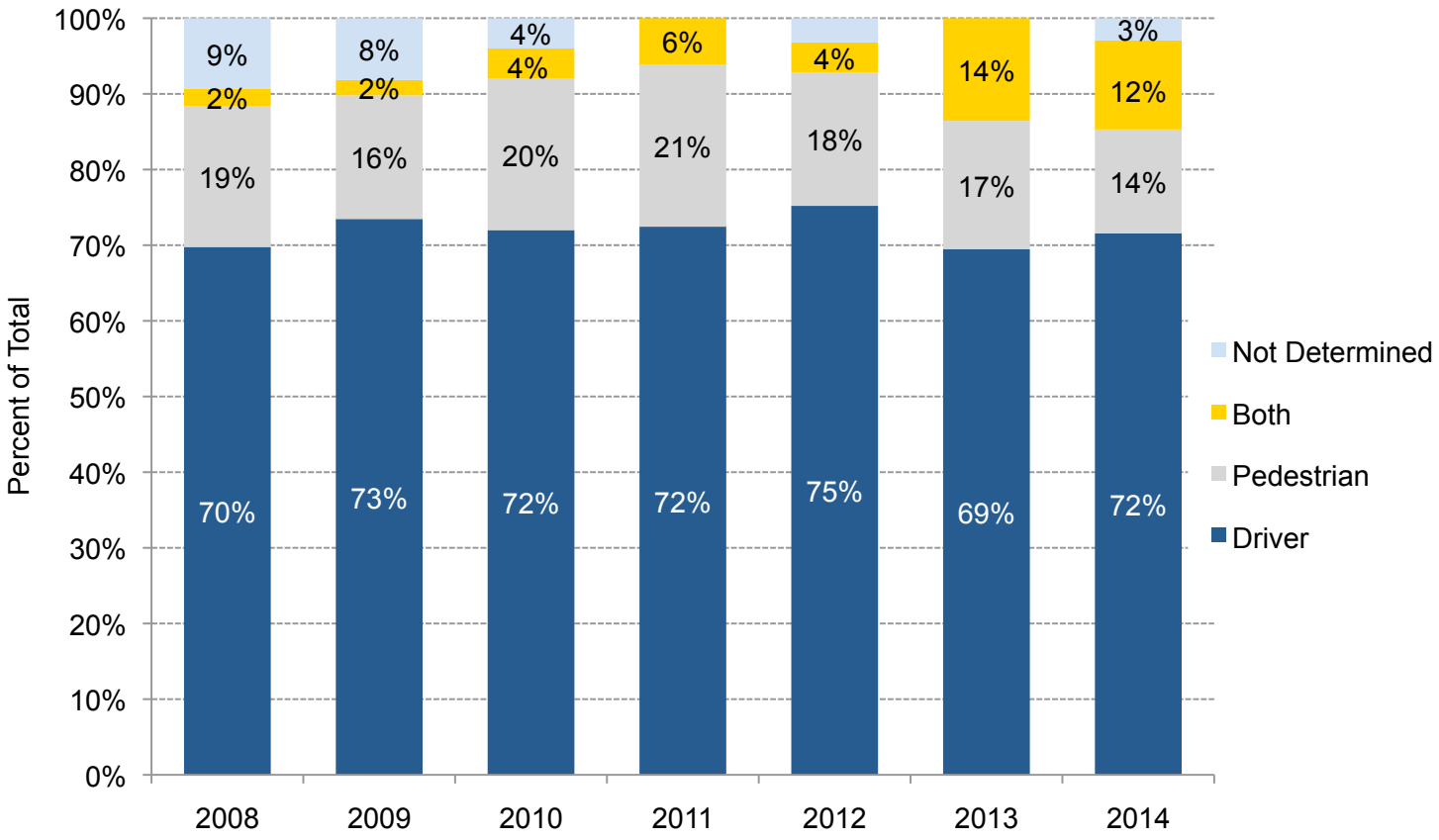


As with overall pedestrian and motor vehicle collisions, collisions in parking facilities peaked in October.

January 2014 had 12 collisions, which was above the CY11-CY13 average of 8.

Source: MCPD

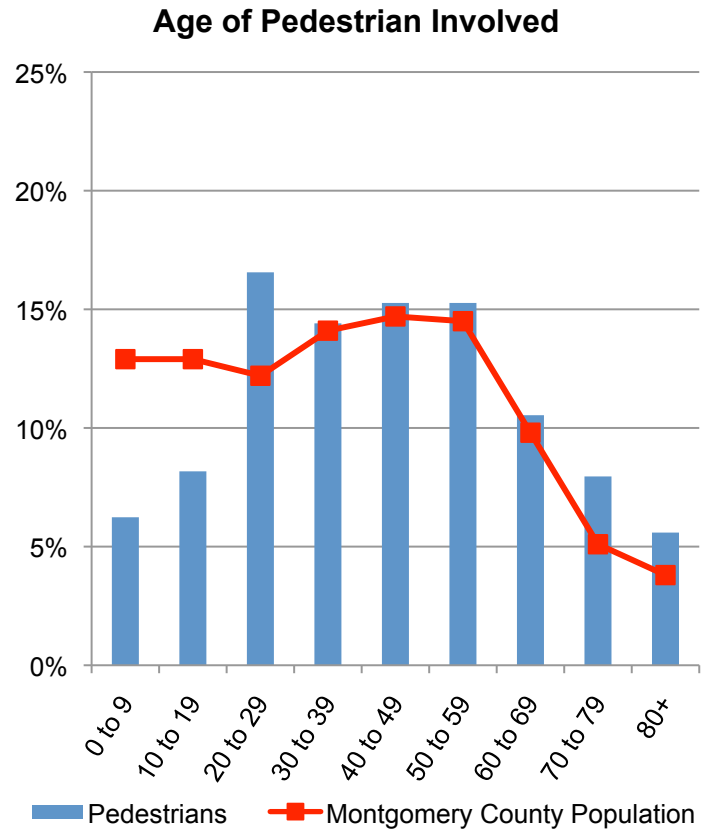
Collisions in Parking Lots/Garages by Fault

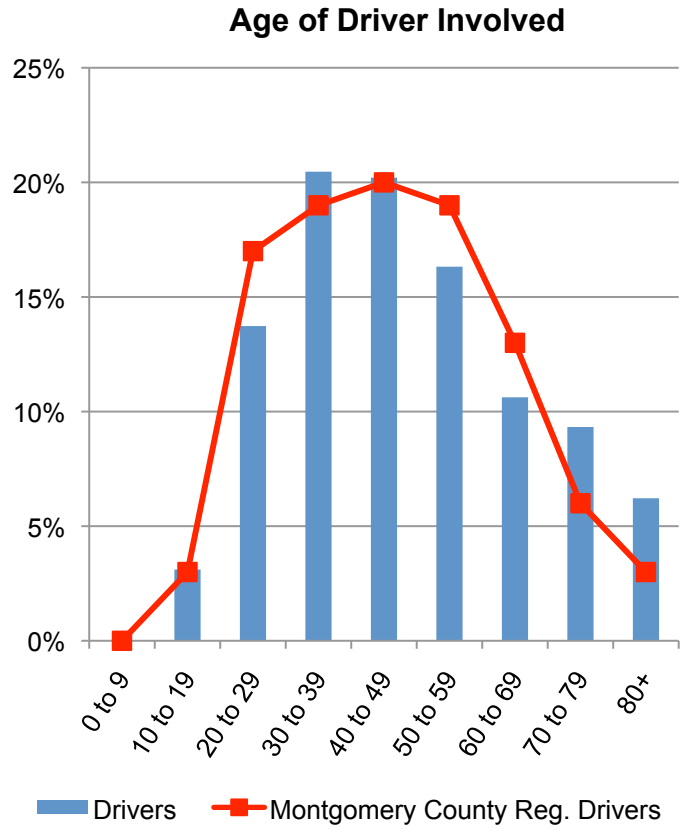


Drivers are at fault for collisions in parking facilities at a higher rate than on roadways.

Source: MCPD

Collisions in Parking Lots/Garages by Age Group from 2011-2014





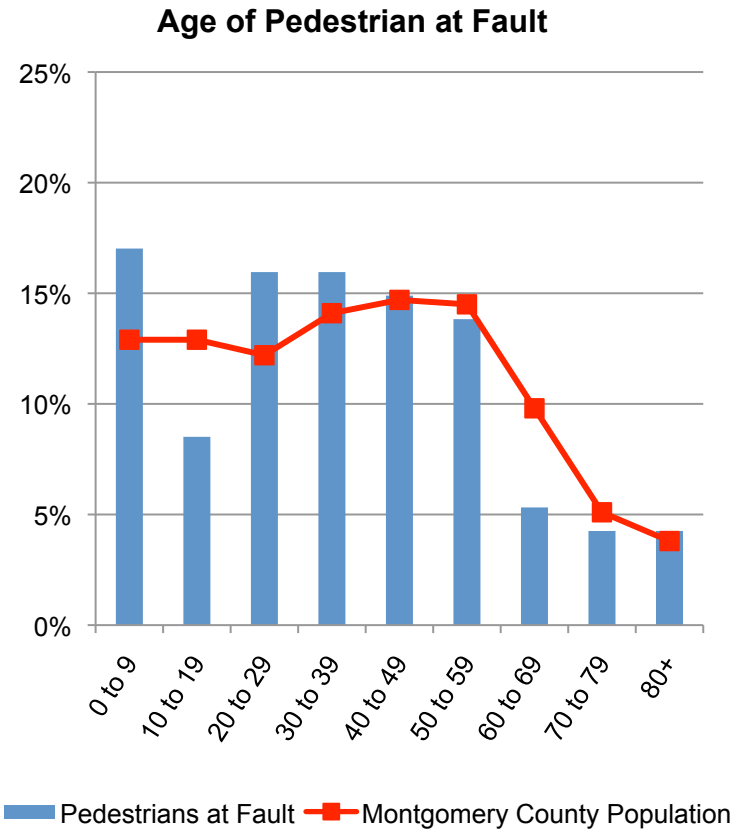
NOTE: Excludes persons where age was not captured.

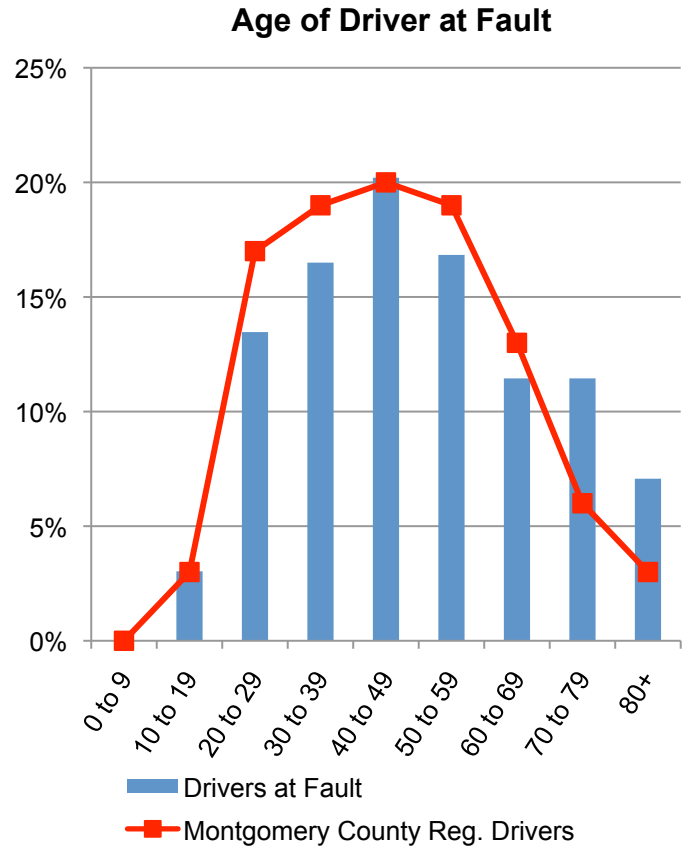
Drivers older than 70 are overrepresented in being involved in a parking lot collision with a pedestrian as compared to their population of registered drivers.

Younger pedestrians, age 19 and below, are less likely to be involved in a parking lot collision as compared to their share of the overall county population.

Source: MCPD

Collisions in Parking Lots/Garages by Age Group and Fault from 2011-2014





NOTE: Excludes collisions where fault was either both or not determined. Excludes persons where age was not captured.

For drivers at fault, the age group of 70 and older are overrepresented as compared to their proportion of registered drivers in Montgomery County.

For pedestrians at fault, the party at fault tends to be younger with the 0 to 9, 20 to 29, and 30 to 39 age groups overrepresented as a proportion of the total county population.

Source: MCPD

Variables for Drivers At-Fault in Parking Lot Ped. Collisions – 2011 to 2014

Driver Movement	# of Collisions
Backing	92
Moving at Constant Speed	53
Accelerating	38
Making Left Turn	32
Parking	22
Starting From Parked Position	22
Slowing or Stopping	19
Making Right Turn	17
Starting From Lane	4
<blank>	29
Other Reasons/ Unknown	9

Gender	# of Collisions
Male	172
Female	129
<blank>	30
Unknown	6

Primary Cause	# of Collisions
Inattentive/Failed to Give Full Time and Attention	102
Improper Backing	59
Fail: Yield Right of Way	51
Vision Obstruction (incl. blinded by sun or lights)	10
Improper Parking	8
Too Fast for Conditions	7
Under Influence of Alcohol	4
Failed to Obey Other Traffic Control	3
Ran Off The Road	3
Physical/Mental Difficulty	2
<blank>	45
Other Reasons/ Unknown	43

NOTE: Excludes collisions where fault was either both or not determined.

CountyStat
Performance Measurement and Management

Drivers are at-fault for parking lot collisions with pedestrians in >70% of collisions from 2011 to 2014.

In 27% of parking lot collisions where the driver was at-fault, the driver was backing up the vehicle.

Male drivers were more likely to be at-fault than female drivers.

Source: MCPD

Variables for Pedestrians At-Fault in Parking Lot Ped. Collisions – 2

Ped. Movement	# of Collisions
Cross/Enter Not at Intersection	25
Playing	9
Getting off/on Vehicle	4
Cross/Enter at Intersection	4
Standing	4
Other Working	3
Walking/Riding against Traffic	2
Walking/Riding with Traffic	2
Walking to/from School	1
Driverless Moving Vehicle	1
<blank>	16
Other Reasons/ Unknown	28

Gender	# of Collisions
Male	50
Female	48
<blank>	1

Primary Cause	# of Collisions
Illegally in Roadway	12
Failed to Give Full Time and Attention	8
Fail: yield right of way	5
Clothing not visible	2
Vision obstruction (incl. blinded by sun or lights)	1
<blank>	54
Other Reasons/ Unknown	17

NOTE: Excludes collisions where fault was either both or not determined.

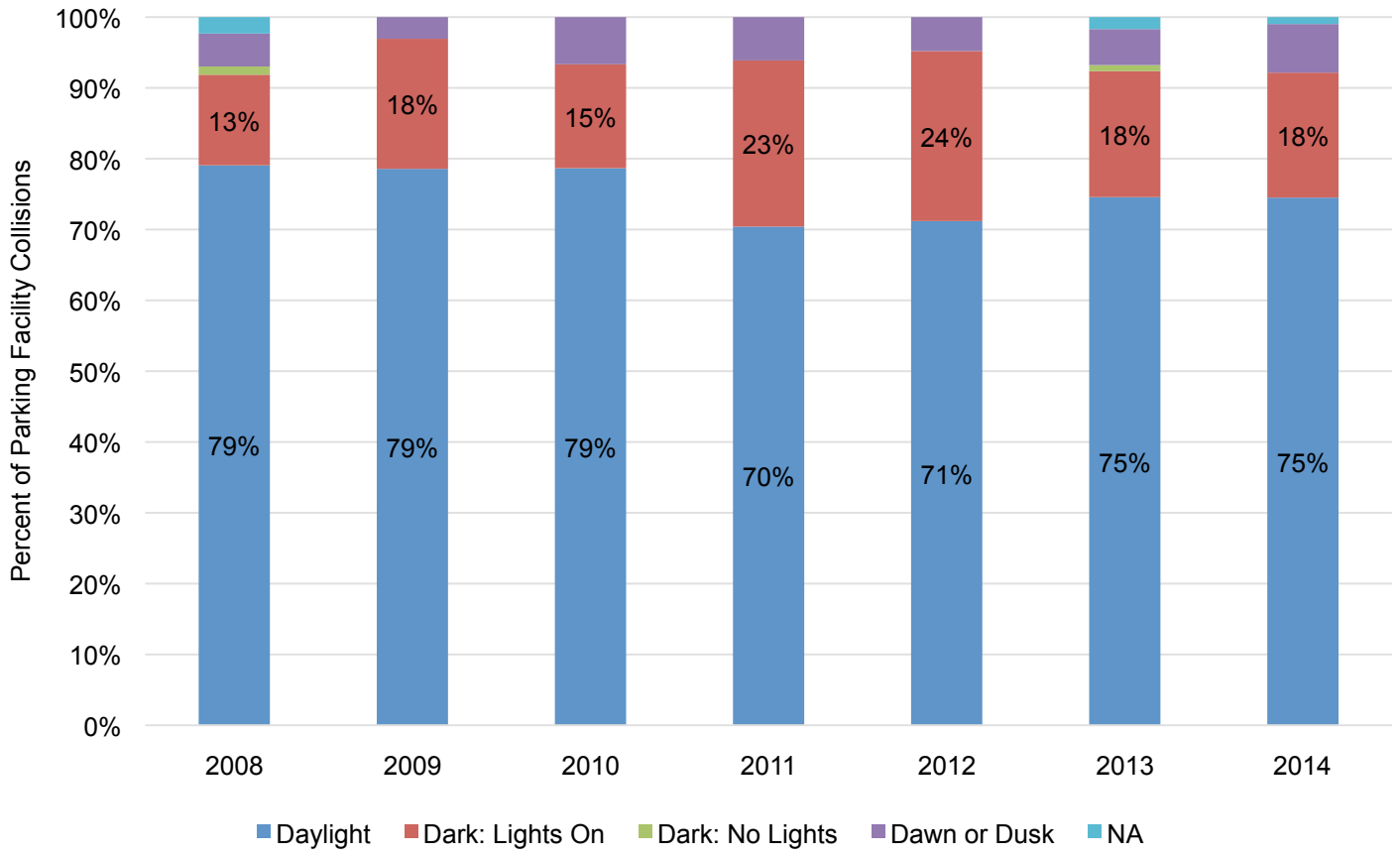
Pedestrians are at-fault for parking lot collisions in approximately 20% of collisions from 2011 to 2014.

Identifying trends in causation is difficult given the high number of collisions (54 out of 99) where no reason was recorded.

Male and female pedestrians were equally likely to be at fault in parking lot collisions.

Source: MCPD

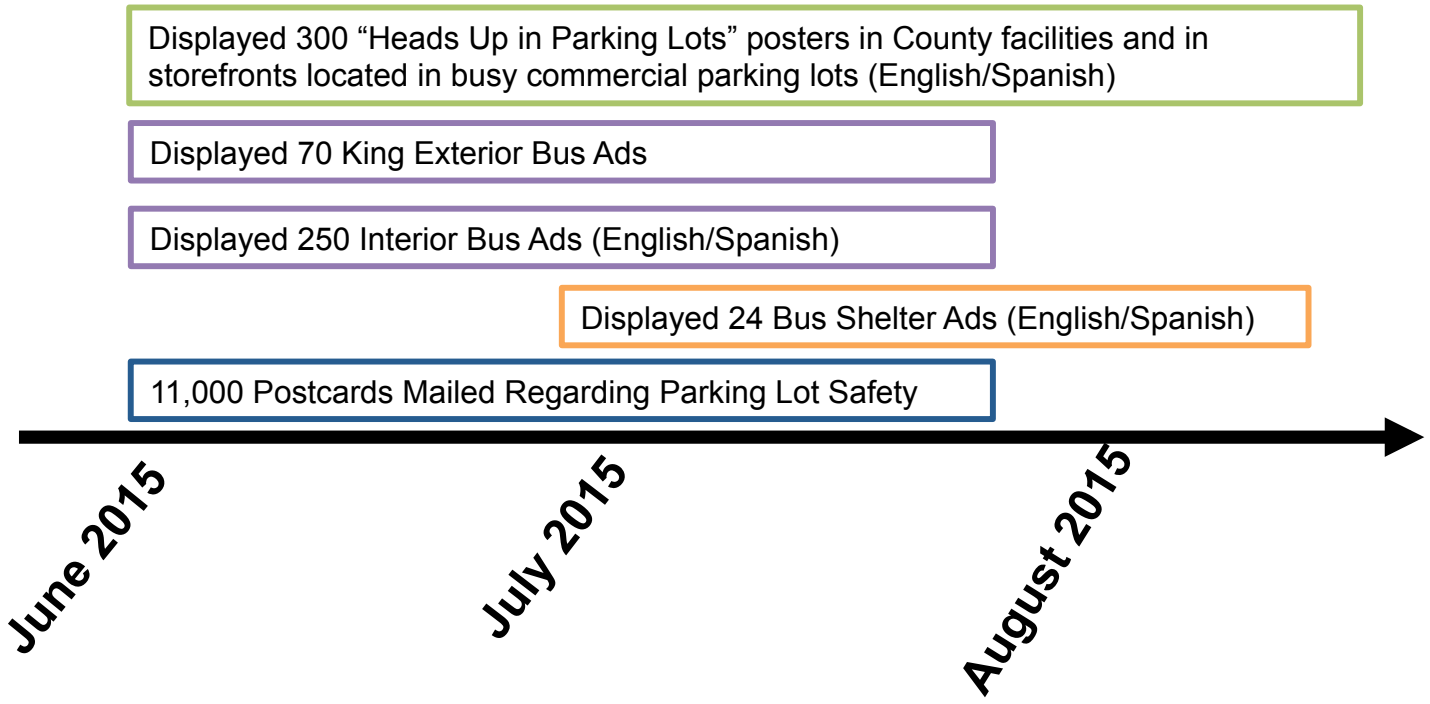
Lighting Conditions in Parking Facilities



From 2008 to 2014, 3 out of 4 collisions in parking facilities occurred during daylight hours.

Source: MCPD

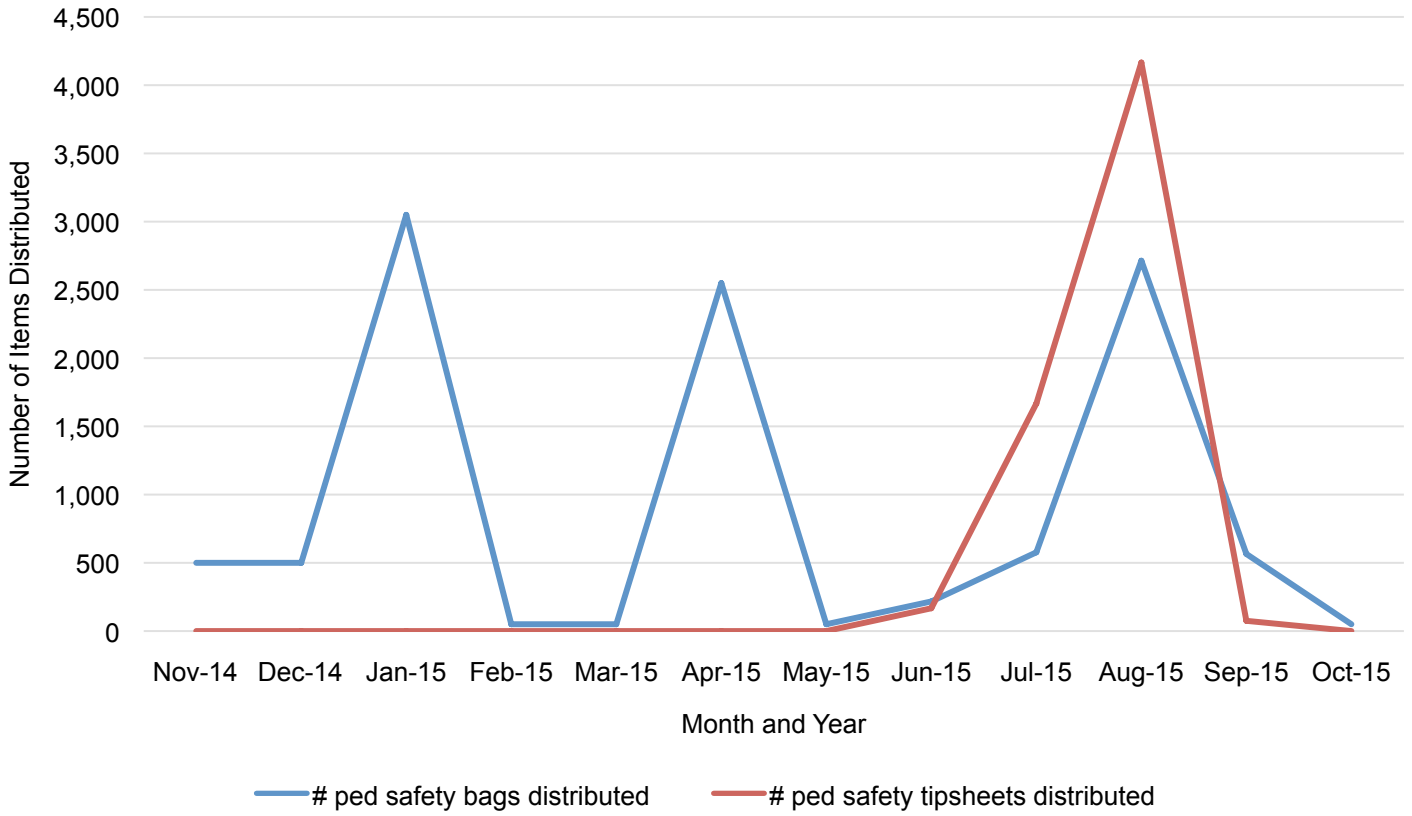
PIO Outreach in Parking Lots – Advertising Campaigns in Summer 2015



PIO undertook 5 different advertising campaigns to raise awareness about parking lot collisions during the summer of 2015.

Source: PIO

PIO Outreach in Parking Lots – Ped Safety Bag and Tip sheet Distribution



From November 2014 through October 2015, PIO and other county partners (MCPD, MCFRS, DEP and volunteers) have distributed 10,873 pedestrian safety bags and 6,075 tip sheets.

Source: PIO

CountyStat
Performance Measurement and Management

Enforcement

Traffic Enforcement Data

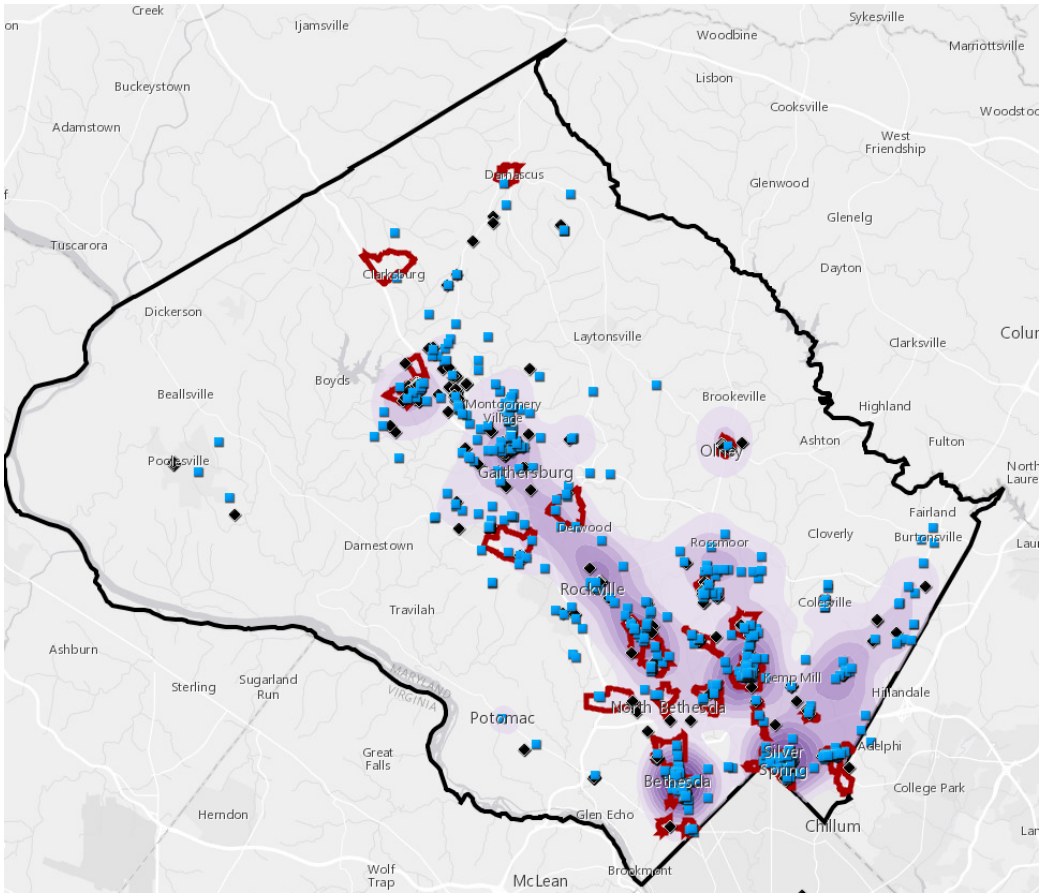
CountyStat
Performance Measurement and Management

Traffic enforcement data presented in this session come directly from [MCPD's Traffic Violations dataset available via DataMontgomery]. This dataset only includes electronic traffic tickets written by MCPD, so other municipal police agencies in Montgomery County are **excluded**. The following charges are included that relate to pedestrian safety:

Driver Charges		Pedestrian Charges			
21-202(e)	21-504(c)	21-202(l)	21-503(d)	21-507 G3I(i1)	21-509(f)
21-202(k)	21-511(a1)	21-203(c)	21-505	21-507(g3ii2)	21-510(a)
21-209(2)	21-511(a2)	21-203(d)	21-506(a)	21-509(a)	21-510(b)
21-502(a2)	21-511(a3)	21-502(b)	21-506(b)	21-509(b)	21-1405(a)
21-502(c)	21-705(b)	21-503(a)	21-507(a)	21-509(c)	
21-504(a)	21-705(d)	21-503(b)	21-507(b)	21-509(d)	
21-504(b)	21-801(h)	21-503(c)	21-507(g3ii1)	21-509(e)	

Source: MCPD

2014 Enforcement by Location - Map



Legend

Traffic_Violations_Drivers

Traffic_Violations_Peds

BikePed_PriorityAreas_MC

CY14_Ped_Collisions by Highest_In Density

- 0.0 - 1.05297589321
- 1.05297589321 - 2.10595178642
- 2.10595178642 - 3.15892767962
- 3.15892767962 - 4.21190357283
- 4.21190357283 - 5.26487946604
- 5.26487946604 - 6.31785535925
- 6.31785535925 - 7.37083125245
- 7.37083125245 - 8.42380714566
- 8.42380714566 - 9.47678303887
- 9.47678303887 - 10.5297589321

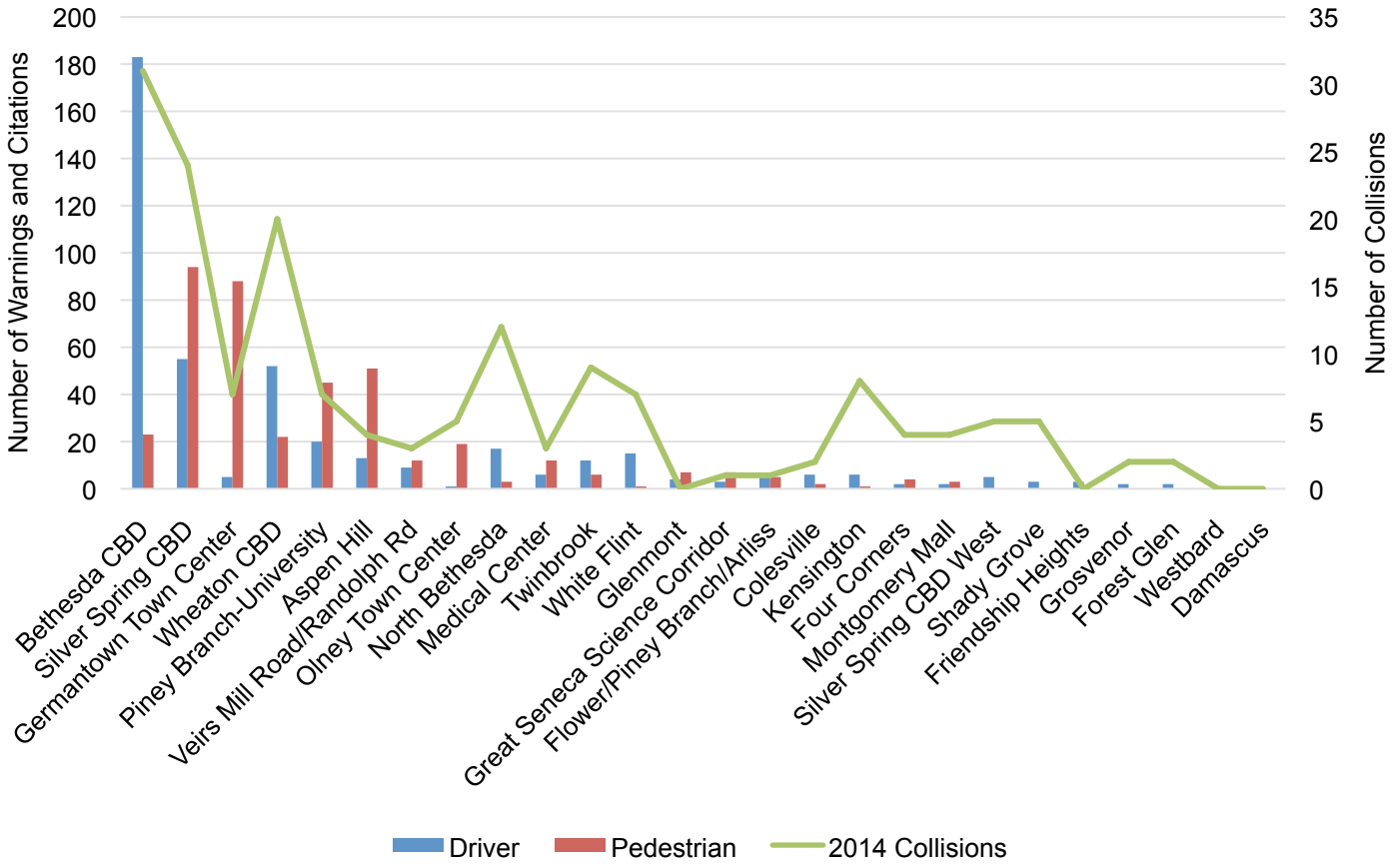
Montgomery County Boundary

Enforcement for pedestrian safety by MCPD in 2014 was targeted at areas with higher rates of pedestrian and motor vehicle collisions.

(**Note**: due to the zoom level and data layering, not all enforcement locations appear in the map on the left).

Source: MCPD

2014 Enforcement by Location – by BiPPA



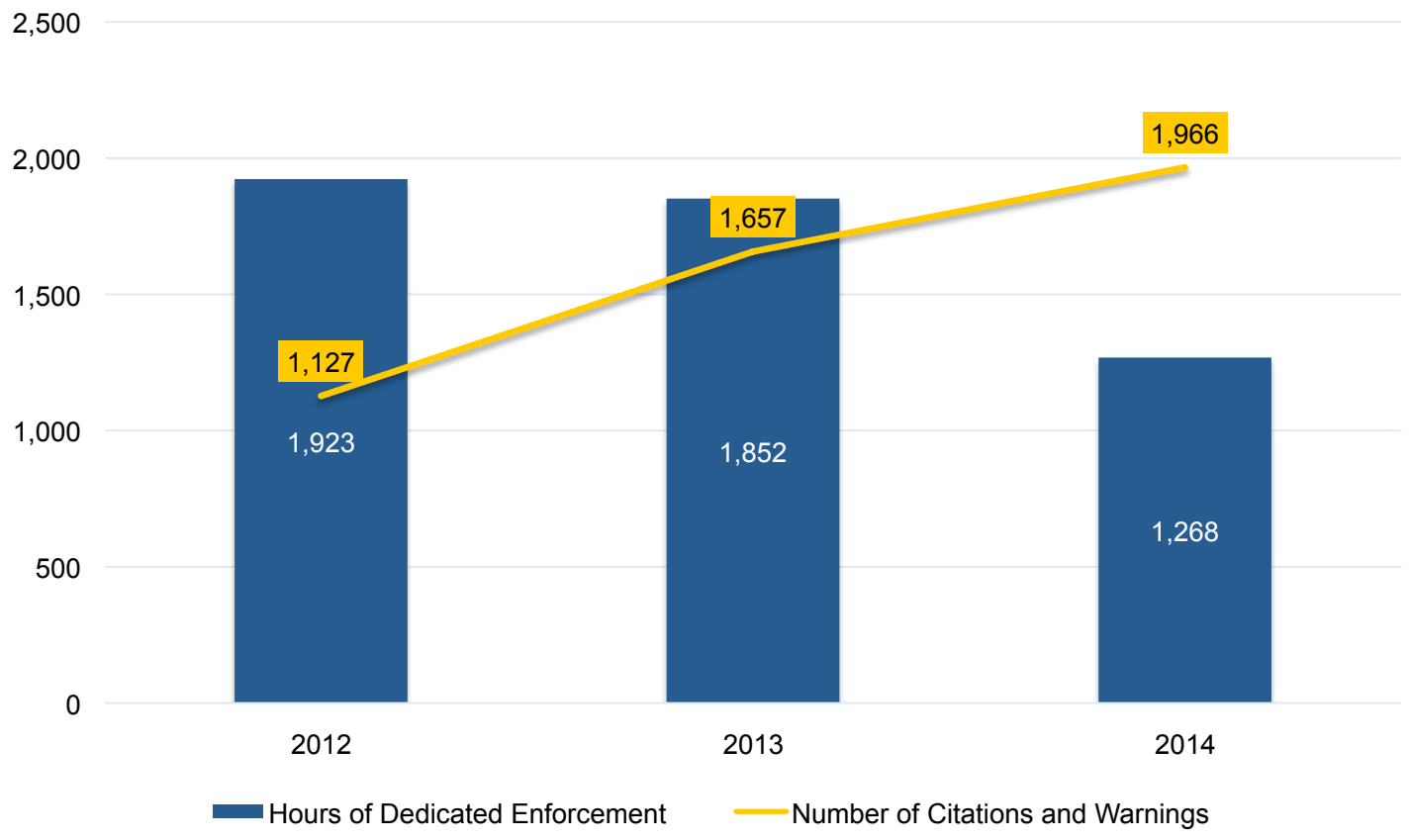
Note: BiPPAs without a warning or citation issued in 2014 are not shown in the chart above.

The two areas with the highest number of collisions, Silver Spring and Bethesda CBDs, are also the areas with the most enforcement.

Potential areas for additional enforcement are Wheaton, Kensington and Rockville Pike in the North Bethesda/White Flint/Twinbrook region.

Source: MCPD

Enforcement by Year: Citations and Hours



Note: Hours worked include regular, comp, and overtime on reason codes POL225 and POL575 (grant funded enforcement).

CountyStat
Performance Measurement and Management

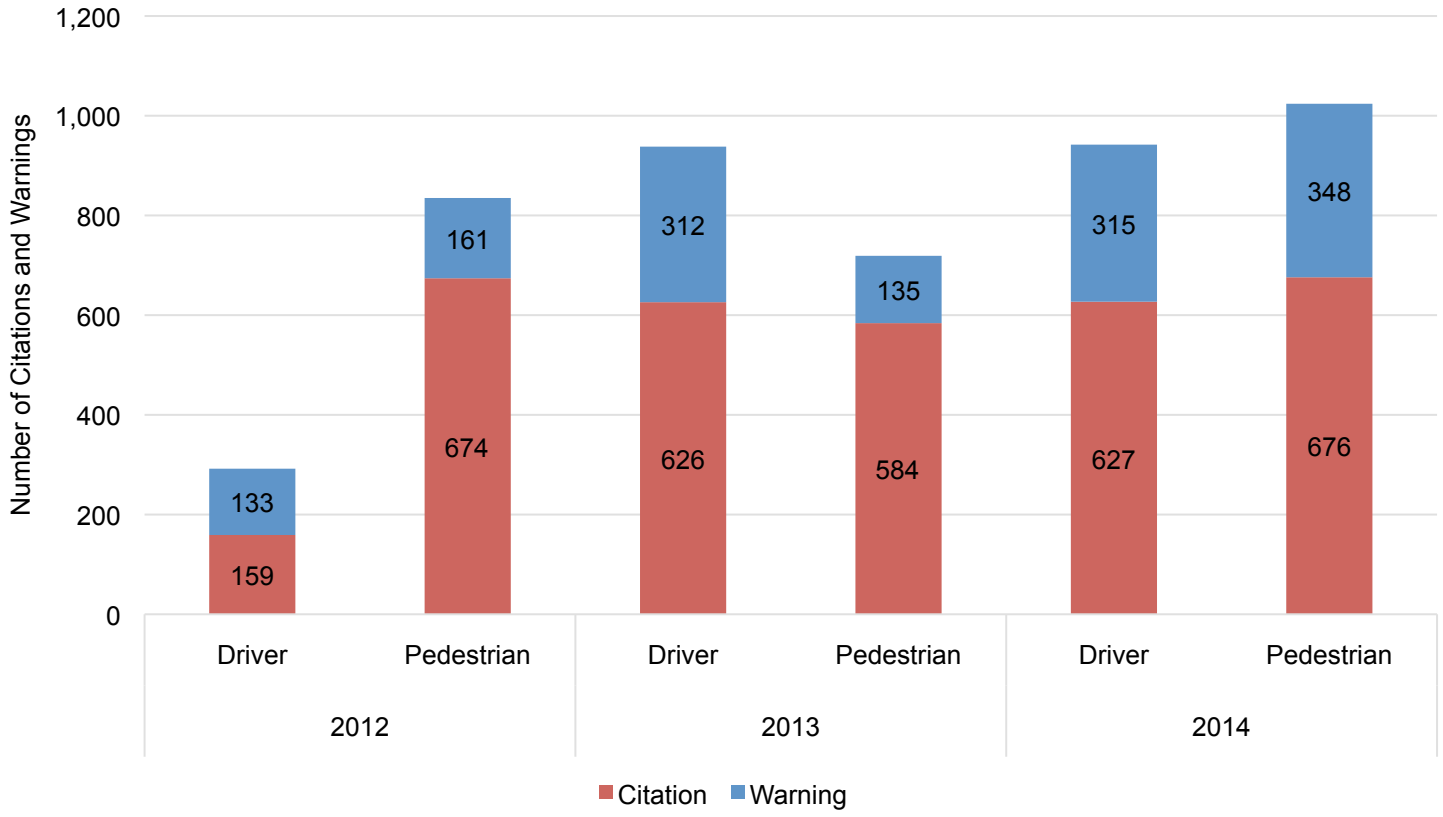
Despite less hours worked under reason codes for pedestrian safety, MCPD is increasing the number of warnings and citations related to pedestrian safety each year.

Total Warnings and Citations by Year

Year	Driver	Ped
2012	292	835
2013	938	719
2014	942	1,024

Source: MCPD

Enforcement by Year and Party Cited



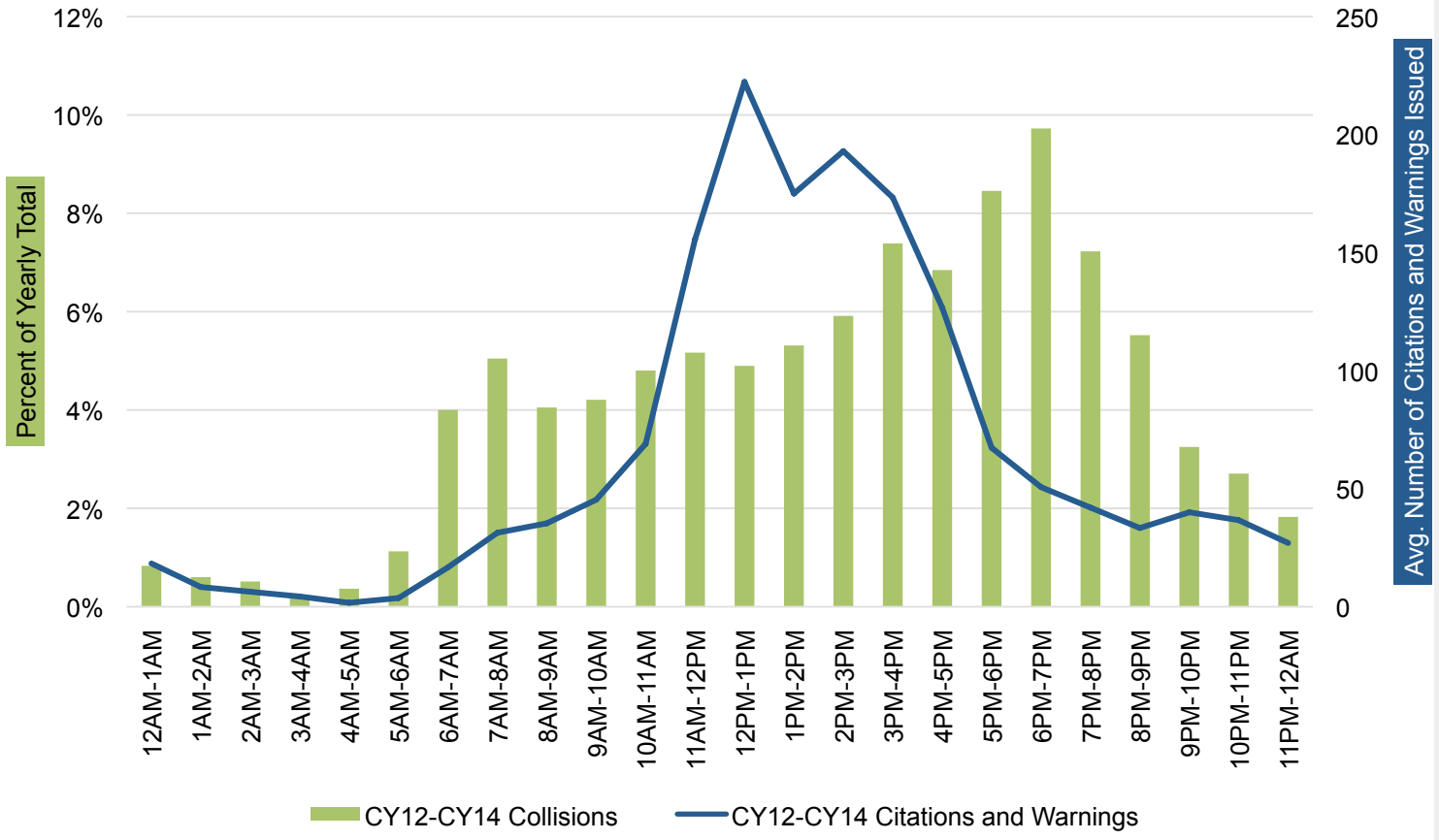
The ratio of warnings to citations evened out for both pedestrians and drivers in 2014. The number of warnings and citations for drivers increased by 222% from 2012 to 2014.

Total Warnings and Citations by Year

Year	Driver	Ped
2012	292	835
2013	938	719
2014	942	1,024

Source: MCPD

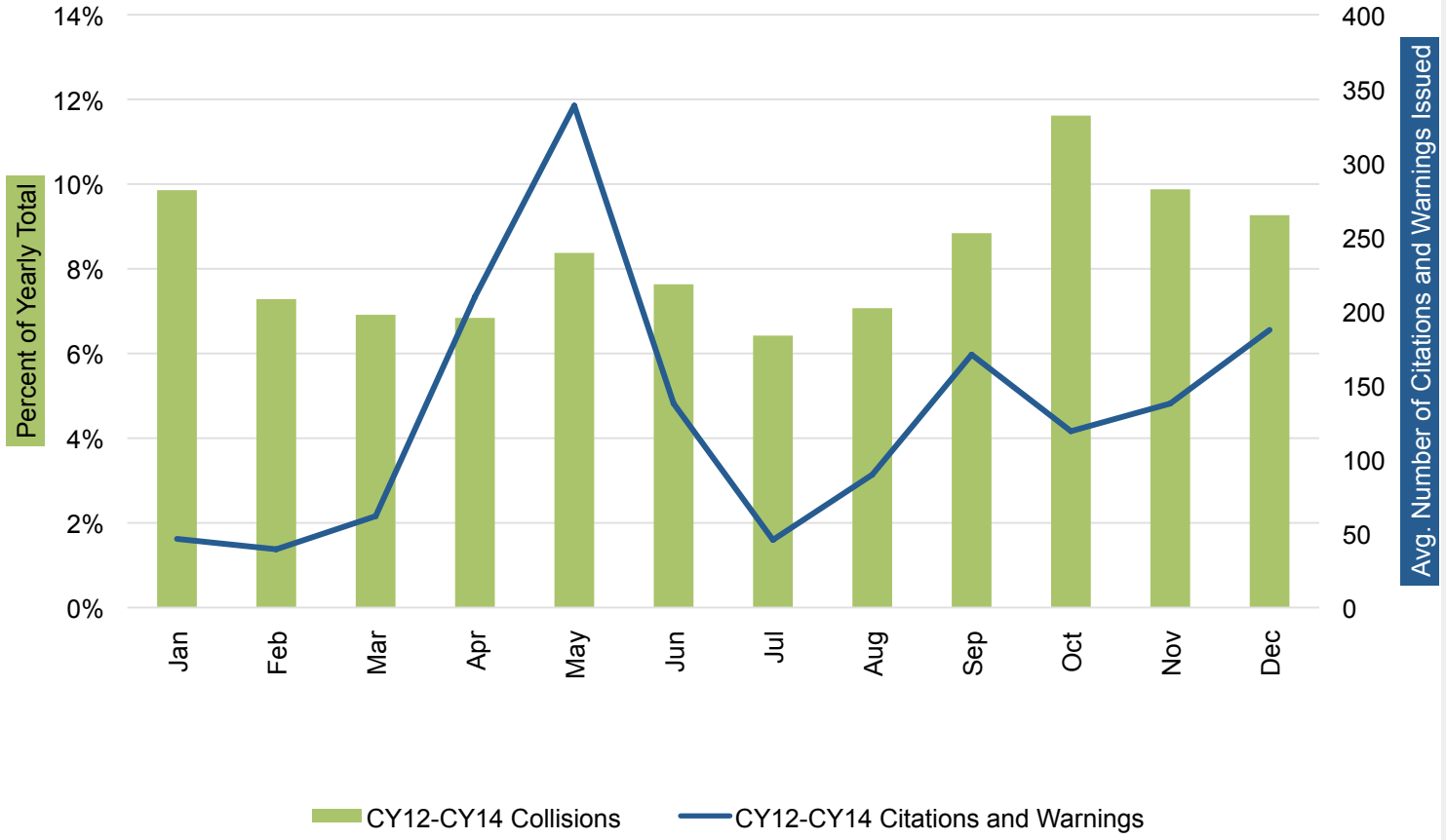
Enforcement and Ped Collisions: Hour of Day



Over the past three years, citations and warnings issued to drivers and pedestrians peaked during the early afternoon, while collisions peaked during the early evening.

Source: MCPD

Enforcement by Month



Enforcement activity peaks in early spring and late fall. These time periods align with the region-wide Street Smart campaigns.

Source: MCPD

CountyStat
Performance Measurement and Management

Engineering

Randolph Road Median Treatment (West)

Traffic Calming Projects with Recorded Collisions Prior to Treatment

CountyStat
Performance Measurement and Management

Project Name	Completion Date	Speeds (MPH)			Time Period Before Treatment	Collisions 3 Years Before Treatment	Collisions Per Month	Time Between Treatment and End of 2014 (months)	Collisions Since Treatment	Collisions Per Month
		Posted	Avg. Before	Avg. After						
Connecticut Ave	July 2007	40	48	40	3 Years	**10**	**0.28**	89	**6**	**0.07**
Arcola Ave	August 2008	30	42	32	3 Years	**3**	**0.08**	76	**5**	**0.07**
Fairland Road	July 2009	40	53	42	3 Years	**2**	**0.06**	65	**0**	**0.00**
Calverton Blvd	July 2009	30	41	35	3 Years	**1**	**0.03**	65	**2**	**0.03**
Sligo Ave	September 2009	30	34	31	3 Years	**1**	**0.03**	63	**4**	**0.06**
Carroll Ave	November 2009	25	33	27	3 Years	**2**	**0.06**	61	**1**	**0.02**
Waring Station Road	April 2012	30	38	34	3 Years	**4**	**0.11**	32	**3**	**0.09**
				Avg. # of Collisions		**3.3**	**0.09**		**3.2**	**0.05**

Speed decline >= 5mph

Increase in Collisions After Treatment

In traffic calming areas where collisions were recorded within 3 years prior to treatment, average speeds dropped by 6.9 mph.

Collisions per month are down 44% in these areas. The only area to see an increase in collisions per month was Sligo Ave.

Source: DOT

Traffic Calming Projects with No Recorded Collisions Prior to Treatment

CountyStat
Performance Measurement and Management

Project Name	Completion Date	Speeds (MPH)			Time Period Before Treatment	Collisions 3 Years Before Treatment	Collisions Per Month	Time Between Treatment and End of 2014 (months)	Collisions Since Treatment	Collisions Per Month
		Posted	Avg. Before	Avg. After						
Lockwood Drive	July 2009	30	40	30	3 Years	**0**	**0.00**	65	**2**	**0.03**
Spartan Road	November 2009	30	40	33	3 Years	**0**	**0.00**	61	**0**	**0.00**
Dale Dr	August 2010	30	39	34	3 Years	**0**	**0.00**	52	**0**	**0.00**
Prince Phillip Drive	June 2011	30	36	31	3 Years	**0**	**0.00**	42	**0**	**0.00**
Cedar Lane	May 2012	30	36	30	3 Years	**0**	**0.00**	31	**1**	**0.03**
Jones Bridge Road	May 2012	30	36	30	3 Years	**0**	**0.00**	31	**0**	**0.00**
Rainbow Drive	May 2012	25	31	26	3 Years	**0**	**0.00**	31	**0**	**0.00**
Franklin Ave	August 2012	30	34	33	3 Years	**0**	**0.00**	28	**0**	**0.00**
Homcrest Road	July 2013	25	36	33	3 Years	**0**	**0.00**	17	**0**	**0.00**
Galway Drive	August 2013	25	N/A	N/A	3 Years	**0**	**0.00**	16	**1**	**0.06**
				Avg. # of Collisions		**0**	**0.00**		**0.70**	**0.01**

Speed decline >= 5mph

Increase in Collisions After Treatment

For traffic calming projects with no recorded collisions prior to treatment, the average speed dropped by 5.3 mph. Out of these 10 projects, 3 have recorded a pedestrian collision since the project finished.

Source: DOT

Current Street Lighting Projects in HIAs

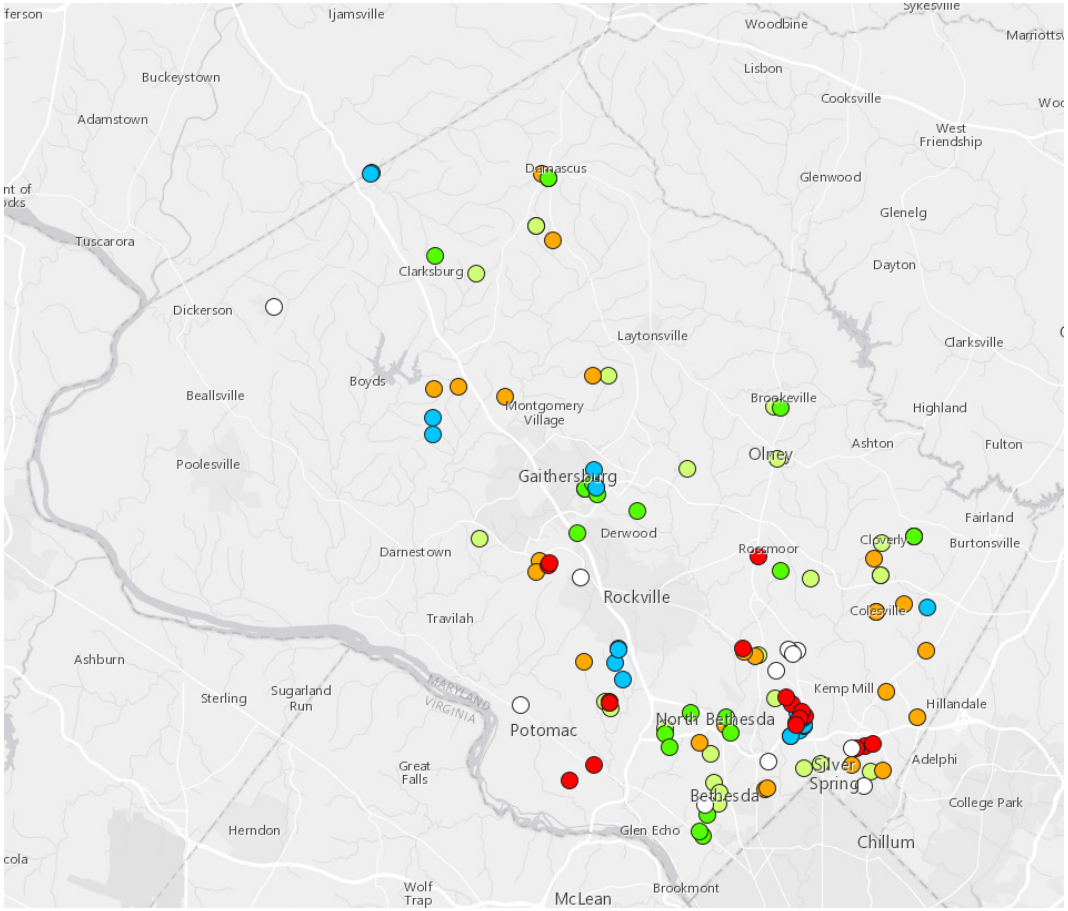
Project	Project Limits	Project Status	Costs
Old Georgetown Road	between Arlington Road to Moorland Lane	Ongoing lighting improvements	$90,000
Fenton Street	between Cameron Street and Wayne Ave	Ongoing – converting lights to LED	$130,000
Connecticut Ave	between Georgia Ave and Aspen Hill Road	Design drawings sent to PEPCO	$250,000 (cost is high due to presence of high tension wires)
E. Gude Drive	between Calhoun Drive and Southlawn Lane	Design drawings sent to PEPCO	$200,000

After last year's meeting regarding collisions in the dark, DOT was working on the following projects in HIAs. These projects are estimated to cost around $670,000.

Evaluation of the lighting improvements is currently not possible since the projects are ongoing.

Source: DOT

New Sidewalk Construction Projects (1/2)

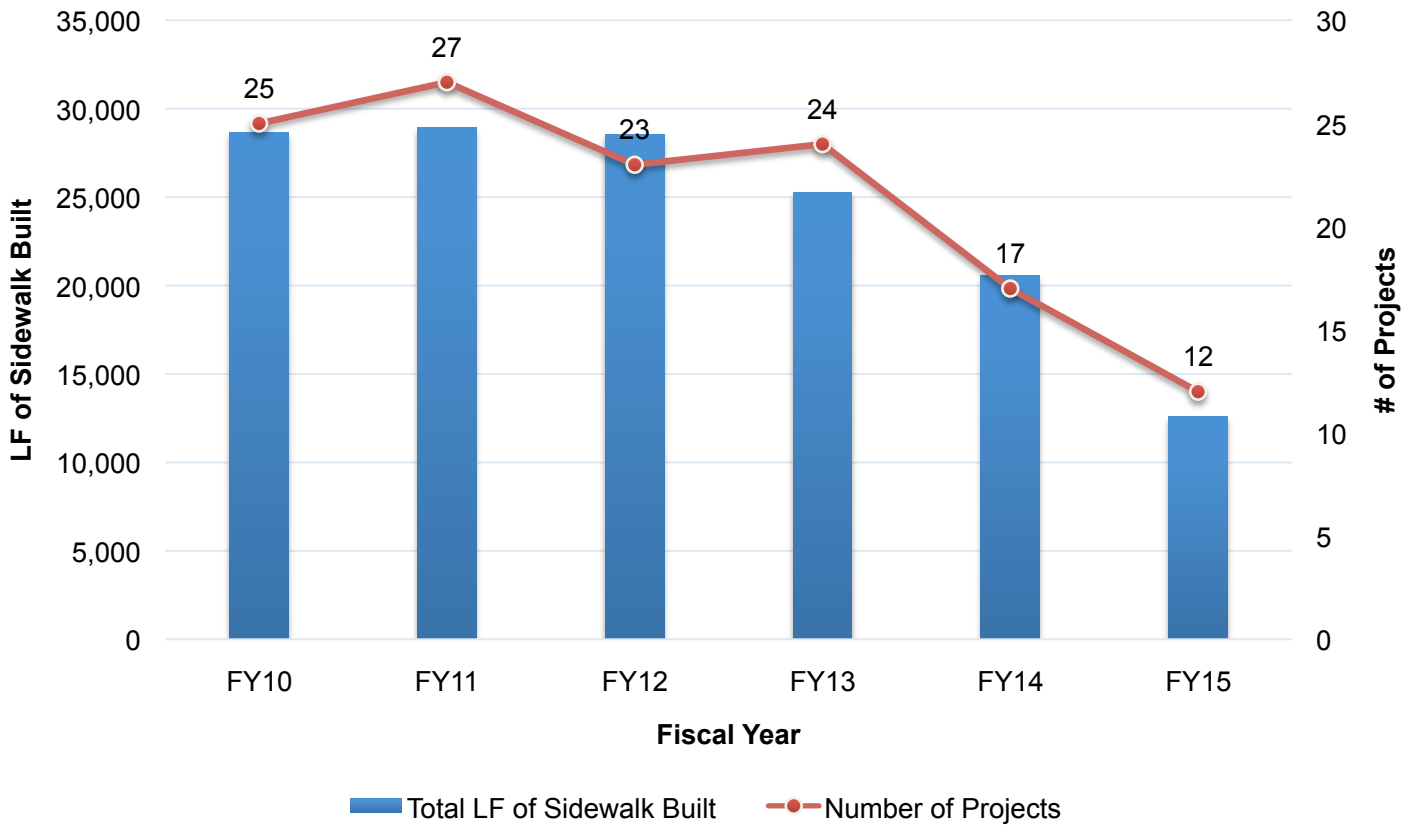


From FY10 to FY15, DOT constructed 144,552 linear feet of new sidewalk across 128 projects.

From FY10 to FY15, the number of projects completed per year has declined by 52% and the linear feet of sidewalk constructed declined by 56%.

Source: DOT

New Sidewalk Construction Projects (2/2)



From FY10 to FY15, DOT constructed 144,552 linear feet of new sidewalk across 128 projects.

From FY10 to FY15, the number of projects completed per year has declined by 52% and the linear feet of sidewalk constructed declined by 56%.

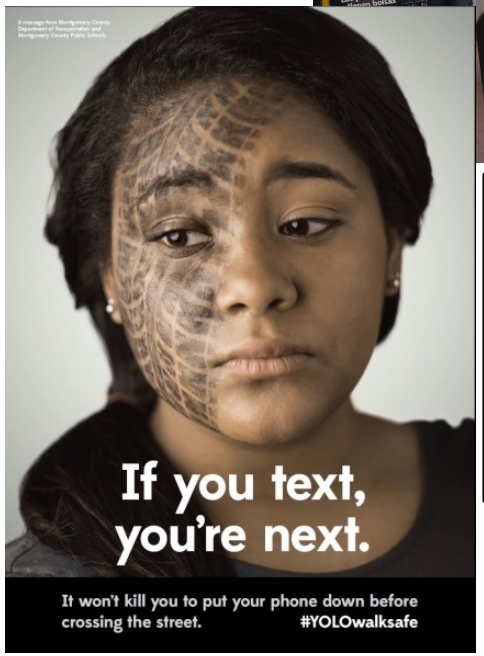
Source: DOT

CountyStat
Performance Measurement and Management

Education

MCDOT Pedestrian Safety Education: Targeting Visibility, Distraction, and Youth

- Street-level outreach in Bethesda and Silver Spring
- Regional Street Smart Campaign (spring and fall)
- Expanded Transit Advertising – Using the multi-award winning YOLO Messaging (Nov. 2014 – May 2015)
- Coordinating Education with Enforcement (spring-summer 2015)

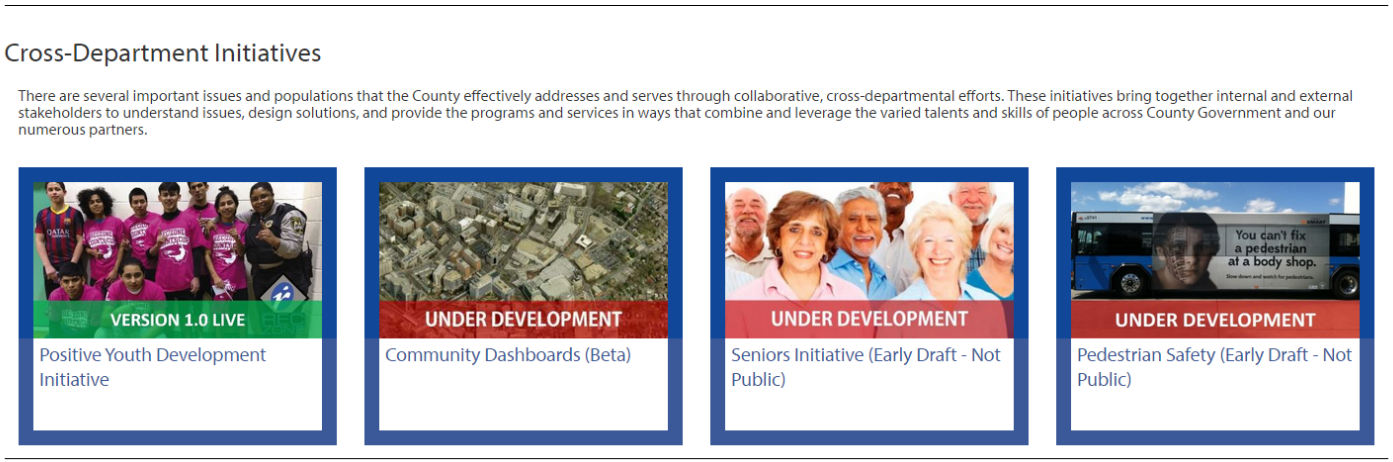


Above: Street Outreach in Downtown Silver Spring
Left: Youth-targeted ad warning about texting and crossing
Far Left: Advertisement encouraging pedestrians to wear bright or reflective clothing

Source: DOT

Updated Ped Safety Performance Measures

As a follow-up to this session, CountyStat will continue to work with the pedestrian safety team to review and develop new performance measures for the initiative. The new measures will live on CountyStat's webpage once the measures are finalized.



CountyStat's new website allows for easier tracking and presenting of cross-department initiatives. The Pedestrian Safety Initiative will have new measures to better track activity and performance across engineering, education, and enforcement efforts.

CountyStat
Performance Measurement and Management

Appendix:
List of All Schools with Pedestrian Collisions within a ¼ Mile

CountyStat
Performance Measurement and Management

Elementary Schools with Pedestrian Collisions within a ¼ Mile

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages (1/5)

CountyStat
Performance Measurement and Management

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Bethesda	10	2	1	5	6	8	32	5.3	0% (0)
New Hampshire Estates	6	5	0	6	5	5	27	4.5	7% (2)
Gaithersburg	3	3	0	0	3	2	11	1.8	18% (2)
Glenallan	0	1	2	4	3	1	11	1.8	0% (0)
South Lake	0	2	2	3	2	1	10	1.7	10% (1)
Olney	1	3	1	1	1	1	8	1.3	0% (0)
Harmony Hills	1	2	1	1	1	1	7	1.2	0% (0)
Burnt Mills	0	1	1	0	2	2	6	1.0	0% (0)
Forest Knolls	0	1	0	2	2	1	6	1.0	0% (0)
Greencastle	1	0	1	1	1	2	6	1.0	17% (1)
Rock Creek Forest	3	1	0	1	0	1	6	1.0	0% (0)
Stedwick	2	0	0	0	2	1	5	0.8	0% (0)
Fields Road	1	1	0	0	1	1	4	0.7	0% (0)
Great Seneca Creek	0	2	1	1	0	0	4	0.7	0% (0)
Somerset	1	0	1	0	1	1	4	0.7	0% (0)
Summit Hall	2	0	1	1	0	0	4	0.7	0% (0)

Key:

Grant B – 2/1/08-12/31/09	Grant C – 1/1/09-12/31/10	Grant D – 1/1/10-12/31/11	Grant E – 7/1/11-12/31/13	Grant F – 10/1/13-12/31/15

Elementary schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

24 of 31 (77%) elementary schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014

Source: MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages (2/5)

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Beverly Farms	0	1	0	0	1	1	3	0.5	67% (2)
Burtonsville	0	0	1	1	1	0	3	0.5	0% (0)
Chevy Chase	1	1	0	0	0	1	3	0.5	0% (0)
Cloverly	1	0	2	0	0	0	3	0.5	0% (0)
Fox Chapel	1	0	1	0	0	1	3	0.5	33% (1)
Germantown	0	2	0	1	0	0	3	0.5	0% (0)
JoAnn Leleck	1	1	0	1	0	0	3	0.5	33% (1)
Montgomery Knolls	0	0	2	1	0	0	3	0.5	0% (0)
Rosemont	1	1	0	1	0	0	3	0.5	0% (0)
Viers Mill	0	1	0	2	0	0	3	0.5	0% (0)
Weller Road	1	0	1	1	0	0	3	0.5	0% (0)
Woodlin	0	0	1	1	1	0	3	0.5	0% (0)
Bells Mill	0	1	0	0	1	0	2	0.3	0% (0)
Clopper Mill	1	1	0	0	0	0	2	0.3	0% (0)
East Silver Spring	1	0	1	0	0	0	2	0.3	50% (1)
Galway	1	0	0	0	0	1	2	0.3	0% (0)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

CountyStat
Performance Measurement and Management

Elementary schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

24 of 31 (77%) elementary schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014

Source: MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages (3/5)

CountyStat
Performance Measurement and Management

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Glen Haven	1	1	0	0	0	0	2	0.3	0% (0)
Highland	1	1	0	0	0	0	2	0.3	0% (0)
Jackson Road	0	1	0	0	0	1	2	0.3	0% (0)
Laytonsville	0	0	0	0	1	1	2	0.3	0% (0)
McAuliffe	0	0	0	0	2	0	2	0.3	0% (0)
North Chevy Chase	1	0	1	0	0	0	2	0.3	0% (0)
Poolesville	0	0	1	0	0	1	2	0.3	0% (0)
Ride	0	1	0	0	0	1	2	0.3	0% (0)
Rock View	1	0	0	0	1	0	2	0.3	50% (1)
Rolling Terrace	1	0	1	0	0	0	2	0.3	0% (0)
Rosemary Hills	0	1	0	0	0	1	2	0.3	50% (1)
Twinbrook	2	0	0	0	0	0	2	0.3	0% (0)
Westbrook	0	0	0	2	0	0	2	0.3	0% (0)
Bradley Hills	0	0	0	1	0	0	1	0.2	0% (0)
Brookhaven	0	0	0	1	0	0	1	0.2	0% (0)
Brown Station	0	0	0	0	0	1	1	0.2	0% (0)

Key:

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- Grant C – 1/1/09-12/31/10
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Elementary schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

24 of 31 (77%) elementary schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014

Source: MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages (4/5)

CountyStat
Performance Measurement and Management

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Carson	0	0	0	1	0	0	1	0.2	0% (0)
Clarksburg	0	0	1	0	0	0	1	0.2	0% (0)
Clearspring	0	1	0	0	0	0	1	0.2	100% (1)
Daly	0	1	0	0	0	0	1	0.2	0% (0)
Damascus	0	0	1	0	0	0	1	0.2	0% (0)
Farmland	0	1	0	0	0	0	1	0.2	0% (0)
Flower Hill	0	0	0	0	0	1	1	0.2	0% (0)
Garrett Park	1	0	0	0	0	0	1	0.2	0% (0)
Greenwood	0	1	0	0	0	0	1	0.2	100% (1)
Highland View	0	0	0	1	0	0	1	0.2	100% (1)
Lake Seneca	0	1	0	0	0	0	1	0.2	0% (0)
Maryvale	0	0	0	0	0	1	1	0.2	0% (0)
Oak View	1	0	0	0	0	0	1	0.2	0% (0)
Page	0	0	0	0	1	0	1	0.2	100%
Pine Crest	1	0	0	0	0	0	1	0.2	0% (0)
Resnik	0	0	0	0	0	1	1	0.2	0% (0)
Roscoe Nix	1	0	0	0	0	0	1	0.2	0% (0)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

Elementary schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

24 of 31 (77%) elementary schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014

Source: MCPD

Collisions Within ¼ Mile of Elementary Schools: Pedestrians of All Ages (5/5)

CountyStat
Performance Measurement and Management

Elementary School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 6-11
Seven Locks	0	0	0	0	1	0	1	0.2	0% (0)
Sligo Creek	0	0	0	0	1	0	1	0.2	0% (0)
Strawberry Knoll	0	0	1	0	0	0	1	0.2	0% (0)
Takoma Park	0	0	0	0	0	1	1	0.2	0% (0)
Travilah	0	0	0	0	0	1	1	0.2	0% (0)
Waters Landing	1	0	0	0	0	0	1	0.2	100% (1)
Watkins Mill	0	1	0	0	0	0	1	0.2	0% (0)
Westover	0	1	0	0	0	0	1	0.2	0% (0)

Elementary schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

24 of 31 (77%) elementary schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

Source: MCPD

CountyStat
Performance Measurement and Management

Middle Schools with Pedestrian Collisions within a ¼ Mile

Collisions Within ¼ Mile of Middle Schools: Pedestrians of All Ages (1/2)

Middle School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 12-14
Argyle	0	2	1	1	2	4	10	1.7	20% (2)
Clemente	2	1	1	1	1	0	6	1.0	33% (2)
Lakelands Park	2	2	1	0	1	0	6	1.0	17% (1)
Loiederman	1	1	2	0	1	0	5	0.8	0% (0)
Montgomery Village	2	1	0	1	1	0	5	0.8	20% (1)
Wood	1	2	0	0	0	2	5	0.8	0% (0)
White Oak	1	1	0	0	0	2	4	0.7	0% (0)
Eastern	0	0	0	1	2	0	3	0.5	0% (0)
Neelsville	1	1	1	0	0	0	3	0.5	0% (0)
Shady Grove	0	1	0	2	0	0	3	0.5	0% (0)
King	0	1	0	0	0	1	2	0.3	50% (1)
Kingsview	0	1	0	0	0	1	2	0.3	0% (0)
Newport Mill	1	0	1	0	0	0	2	0.3	0% (0)
Briggs Chaney	0	1	0	0	0	0	1	0.2	0% (0)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

CountyStat
Performance Measurement and Management

Middle schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

4 out of 9 (44%) middle schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014.

Source: MCPD

Collisions Within ¼ Mile of Middle Schools: Pedestrians of All Ages (2/2)

Middle School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 12-14
Cabin John	0	0	0	0	1	0	1	0.2	0% (0)
Gaithersburg	0	0	0	0	1	0	1	0.2	0% (0)
Lee	0	0	0	0	1	0	1	0.2	0% (0)
Parkland	0	0	0	1	0	0	1	0.2	100% (1)
Parks	1	0	0	0	0	0	1	0.2	100% (1)
Pyle	0	0	1	0	0	0	1	0.2	0% (0)
Ridgeview	0	0	0	0	1	0	1	0.2	0% (0)
Rocky Hill	0	1	0	0	0	0	1	0.2	0% (0)
Silver Spring International	0	0	0	0	1	0	1	0.2	0% (0)
Takoma Park	0	0	0	0	0	1	1	0.2	0% (0)
Tilden	0	0	0	0	1	0	1	0.2	0% (0)
West	0	0	0	0	1	0	1	0.2	0% (0)
Westland	0	1	0	0	0	0	1	0.2	100% (1)

Key:

- Grant B – 2/1/08-12/31/09
- Grant C – 1/1/09-12/31/10
- Grant D – 1/1/10-12/31/11
- Grant E – 7/1/11-12/31/13
- Grant F – 10/1/13-12/31/15

CountyStat
Performance Measurement and Management

Middle schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

4 out of 9 (44%) middle schools that participated in the Safe Routes to School program recorded no school aged pedestrian collisions from 2009 to 2014.

Source: MCPD

CountyStat
Performance Measurement and Management

High Schools with Pedestrian Collisions within a ¼ Mile

Collisions Within ¼ Mile of High Schools: Pedestrians of All Ages

High School	2009	2010	2011	2012	2013	2014	2009 to 2014 Total Collisions	2009 to 2014 Avg. Num. of Collisions	% Involving Peds. Age 15-19
Blair	1	1	4	1	4	4	15	2.5	13% (2)
Bethesda Chevy Chase	1	2	1	1	2	3	10	1.7	20% (2)
Kennedy	0	1	1	2	3	1	8	1.3	38% (3)
Northwood	0	2	0	1	2	2	7	1.2	14% (1)
Quince Orchard	2	2	0	0	2	1	7	1.2	14% (1)
Montgomery	0	3	0	0	2	0	5	0.8	80% (4)
Thomas Edison	2	1	1	1	0	0	5	0.8	0% (0)
Wheaton	2	1	1	1	0	0	5	0.8	0% (0)
Gaithersburg	2	1	0	1	0	0	4	0.7	50% (2)
Seneca Valley	0	0	1	0	1	1	3	0.5	33% (1)
Springbrook	1	1	0	1	0	0	3	0.5	67% (2)
Wootton	0	1	1	1	0	0	3	0.5	67% (2)
Churchill	1	0	1	0	0	0	2	0.3	50% (1)
Damascus	0	0	2	0	0	0	2	0.3	50% (1)
Johnson	0	1	0	0	0	1	2	0.3	100% (2)
Watkins Mill	0	0	1	0	1	0	2	0.3	50% (1)
Clarksburg	0	0	0	1	0	0	1	0.2	100% (1)
Einstein	0	0	1	0	0	0	1	0.2	100% (1)
Poolesville	0	0	0	0	0	1	1	0.2	100% (1)
Sherwood	0	1	0	0	0	0	1	0.2	0% (0)
Whitman	0	0	1	0	0	0	1	0.2	0% (0)

CountyStat
Performance Measurement and Management

High schools with no collisions recorded within a ¼ mile of campus are not shown in the following tables.

High Schools do not participate in the Safe Route to Schools grant program.

The county YOLO campaign targeted at high school students was rolled out in September 2014.

Source: MCPD